

UC-NRLF



5C 162 872



U. S. GEOGRAPHICAL SURVEYS,
LIEUT. GEO. M. WHEELER CORPS OF ENGINEERS, IN CHARGE.

CATALOGUE
OF
MEAN DECLINATION OF 2018 STARS
FOR
JANUARY 1, 1875

T. H. SAFFORD, Ph. D.,

LIBRARY
OF THE
UNIVERSITY OF CALIFORNIA.

GIFT OF
COL. T. H. HANDBURY.

Class



Aug 19-1879

Cam ZH Hambling

ENGINEER DEPARTMENT, UNITED STATES ARMY

CATALOGUE

OF THE

MEAN DECLINATION OF 2018 STARS

BETWEEN

0^h TO 2^h AND 12^h TO 24^h RIGHT ASCENSION,

AND

10° AND 70° OF NORTH DECLINATION,

FOR

JANUARY 1, 1875.



PREPARED UNDER THE DIRECTION OF

FIRST LIEUTENANT GEO. M. WHEELER,

CORPS OF ENGINEERS, U. S. ARMY,

IN CHARGE OF U. S. GEOGRAPHICAL SURVEYS WEST OF THE 100th MERIDIAN,

BY

T. H. SAFFORD, Ph. D.,

FIELD MEMORIAL PROFESSOR OF ASTRONOMY IN WILLIAMS COLLEGE, MASS.

WASHINGTON:
GOVERNMENT PRINTING OFFICE
1879.

TABLE OF CONTENTS.

	Page.
LETTER OF TRANSMITTAL.....	3
INTRODUCTION	5
CATALOGUE OF 2,018 STARS	17
DETAILS OF POSITION, DIVISION I, B. A. C. STARS 10° TO 20°.....	49
II, B. A. C. STARS 20° TO 30°	81
III, B. A. C. STARS 60° TO 70°.....	113
IV (a)	135
V (b)	181
VI (c).....	189
(a) Dedications of the Lake Survey Catalogue revised.	
(b) New stars classed higher than C not before given.	
(c) New stars of Class C not in British Association Catalogue.	

LETTER OF TRANSMITTAL.

UNITED STATES ENGINEER OFFICE,
GEOGRAPHICAL SURVEYS WEST OF ONE HUNDREDTH MERIDIAN,
Washington, D. C., August 11, 1876.

GENERAL: I have the honor to submit herewith the tabulated manuscript of the mean declinations of 2,018 stars, for the year 1875, computed by Prof. T. H. Safford, and ranging in right ascension from 0 hour to 2 hours and from 12 hours to 24 hours, and in declination from 10° to 70° north.

This catalogue is susceptible of use during the months of the year best adapted to observations in the area west of the Mississippi River, and between latitudes 60° and 20° north. Exhausting, as it does, in a marked degree, all existing data upon the subject, it will be of practical use in latitude work for several years, not only upon this Survey, but such others as those of boundary-lines and in scientific works of like character that may be prosecuted in this region.

The necessity for the preparation of such a catalogue was discussed by Professor Safford and myself in the year 1873, when he was connected with the expedition; and the matter having been presented to the Chief of Engineers, authority for its complete preparation was granted October 27, 1874.

The distribution of stars into classes will prove of utility to the observer using the catalogue, and may possibly call attention to the desirability of further observation upon stars of the Class C, all of which need a redetermination.

Its early publication is earnestly recommended.

Very respectfully, your obedient servant,

GEO. M. WHEELER,
Lieutenant of Engineers.

Brig. Gen. A. A. HUMPHREYS,
Chief of Engineers, U. S. A., Washington, D. C.

OFFICE OF THE CHIEF OF ENGINEERS,
Washington, D. C., August 29, 1876.

Respectfully submitted to the honorable the Secretary of War, recommending that the Catalogue of Stars herein referred to be printed at the Government Printing-Office, and that two hundred and fifty copies be furnished on requisition from this office.

A. A. HUMPHREYS,
Brigadier-General and Chief of Engineers.

Approved:

By order of the Secretary of War.

H. T. CROSBY, *Chief Clerk.*

SEPTEMBER 3, 1876.



INTRODUCTION.

NEWTON, MASS., *August 7, 1876.*

Lieut. G. M. WHEELER, *United States Engineers :*

SIR: The following catalogue of 2,018 stars is submitted as the result of work done according to agreement between us. The main object has been to present a catalogue available for the operations of your office, and of other similar works; and I have spared no pains, as far as the time allowed, to gain valuable results.

A catalogue of the mean declinations (with accompanying approximate right ascensions) of 981 stars, between 30° and 60° of north declination, was computed by myself for the use of the United States Lake Survey, under the direction of Maj. and Bvt. Brig. Gen. C. B. Comstock, and published by the War Department in 1873. This has done good service in latitude work, but the limits of declination were found too narrow for the operations of your office in more southern latitudes. I have, therefore, computed similar positions for 1,037 new stars, mostly in the zone of north declination from 10° to 30° and 60° to 70° , so that the present catalogue includes all stars fit for our present purpose between 10° and 70° of declination in the right ascensions (0^h to 2^h and 12^h to 24^h) oftenest used for latitude work.

A revision of the previous catalogue by the introduction of many observations first published since its computation, and of a few not then within my reach, has been incorporated with the present one. It soon became manifest that the new region now included contains a larger proportion of well-determined stars, owing, I fancy, to the inconvenience of observing near the zenith with the usual fixed instruments.

I have found it necessary, however, to classify the stars according to the degree of accuracy with which their proper motions have been determined. All the declinations, with few exceptions, enjoy a high degree of precision for dates about 1850, which is the average epoch of the best modern observations; but many of them have not been well observed by the older astronomers, Bradley, Piazzzi, Lalande, and Groombridge, so that their proper motions are not yet so certain as they ought to be for the attainment of the last degree of accuracy at the present epoch. Such of these stars, about 600 in number, as have not been lately observed, have been placed apart by themselves, in Class C, for a double reason:*

First, that the observers at fixed observatories may see at a glance what stars especially need redetermination in both elements; *one* thorough determination, consisting of three, or better four, observations, will be sufficient in most cases to remove the uncertainty and transfer the star in question to the next higher class, B.

Second, that the latitude-observers may use these stars only in case of absolute necessity.

The remaining stars are still divided into three classes:

AA, those whose positions rest upon a great multitude of recent observations; these stars are chiefly those employed as zero-stars in the various ephemerides.

A, those whose places have been well settled by at least three observations at each of two observatories, or by a great number of observations at one, since 1860 (or since 1855, when the older determinations give the proper motion with great certainty).

* The stars of Class C were finally incorporated with the rest of the catalogue for greater convenience in its practical use.

B, those whose places have been but once so fixed since the same dates.

The best estimate which I can make of the probable error of the declination, for 1875, of an average star in each of these four classes, is :

Class AA $\pm 0''.18$

Class A $\pm 0''.28$

Class B $\pm 0''.43$

Class C $\pm 0''.7$

I have here been careful to allow a sufficient amount for the uncertainty of proper motion ; the theoretical value would have been somewhat less, but I have not thought it safe to consider the probable error of annual proper motion as less than $0''.01$ in any case. The greatest difficulty, of course, was found in assigning a probable error to stars of the Class C. The value given was derived from 40 stars of the catalogue of 981 stars, which were of that class when that work was published, but have now been rated higher, in consequence of getting new material. They give a probable error

$$(\text{Lake Survey Catalogue—newer observations}) = \pm 0''.67$$

for the mean epoch, 1869. This includes the probable error of about four newer observations in each case, which is enough to balance the uncertainty of proper motion from 1869 to 1875.

The re-observation of a sufficient number of the present stars of this class, to give a more accurate determination of this probable error, has been requested, through your office and that of the Chief Engineer, U. S. A., of Admiral Davis, Superintendent of the United States Naval Observatory ; the observations are nearly completed at the Observatory, but not yet reduced.

The present catalogue contains, as before stated, a revision of all the 981 stars of the Lake Survey Catalogue above referred to. Since that was published, great activity has been manifested in making and publishing excellent observations of those stars. I may especially notice—

1. Professor Auwers's re-reduction of Bradley ; the declinations of this were kindly furnished at your request, and have been of the greatest service.

2. The current Greenwich, Washington, and Oxford volumes, including for each a year's results in advance of publication, furnished me by the kindness of Sir George Airy, Admiral Davis, and the Rev. Robert Main respectively. (Since writing this, these volumes have been published, and it appears that the MS. Washington results were not quite complete. They did not include the stars observed once or twice during that year, nor Professor Yarnall's observations. When the volume was published, I noted some of its results in the column of remarks.)

3. Professor Yarnall's admirable catalogue, which contains the results of many years' observations at Washington.

4. Volume 6 of the Observations de Poulkova. These admirable determinations came very late, so that I could not use them throughout, but have employed them to determine a great many difficult cases.

5. In addition to the work recently published, I have employed a good deal of time in searching for isolated determinations of declination—especially in connection with latitude work—scattered in various places. Some declinations by Gauss, Argelander (in one case overlooked by himself when discussing the star many years after), Struve, Bessel, and by other more recent astronomers, have been thus discovered, and have proved to be of the highest precision.

The catalogues used with their epochs are the following :

1755. Bessel's and Auwers's Bradley. (Br.) Auwers's *declinations* are used. I have rarely needed to consult Bradley in right ascension, as Mädler's proper motions are in general good enough for our purposes.

1756. Mayer (M.). Not often used.
1790. Fedorenko's Lalande. (F.)
1800. Gould's D'Agelet. (D'A.) Not much used.
 Baily's Lalande. (Ll.)
 Piazzi. (Pi.)
1810. Groombridge. (Gr.)
1820. Bessel. (B.) } A few fundamental places.
 Gauss. }
1827. Gauss. Latitude stars from his paper on the latitudes of Göttingen and Altona.
1829. The latitude stars used in Struve's Breitengradmessung.
1830. Argelander's Abo Catalogue. (CA.)
 Struve's Positiones Mediæ. (P. M.)
 Pond's Catalogue of 1112 Stars. (Pd.)
1835. Taylor's Madras General Catalogue. (T.)
1836. Rümker's Catalogue. (Rü.)
- 1837-1844. Henderson's Observations. (H.) Separate years; especially 1844.
1840. The Greenwich Twelve-Year Catalogue, first part. (Ay. 12 yr.)
 The Armagh Places of Stars. (Arm.)
- 1841-1855. The Pulcova Observations (Vol. VI); reduced to separate years. (Pulc.)
1845. The Greenwich Twelve-Year Catalogue, second part. (Ay. 12 yr.)
 The Radcliffe Catalogue. (RC.)
 The Pulcova Fundamental Catalogue (Observations, Vols. III, V), with a few scattered observations of other stars. (Pulc.)
1849. Oudemans's Dissertatio Astronomica Inauguralis. (Ou.)
1850. The Greenwich Six-Year Catalogue. (Ay. 6 yr.)
 Jacob's Madras Catalogue. (Ja.)
- 1857, 1859, 1861, 1864. The Königsberg Observations. (Kbg.)
- 1857-1867. The Brussels Observations. (Q.)
1860. The Greenwich Seven-Year Catalogue. (Ay. 60.)
 The Second Radcliffe Catalogue. (RC₂)
 Prof. Yarnall's Washington Catalogue. (Yarn.)
1862. Oöm's Declinations from Prime Vertical Observations made at Pulcova. (Oöm.)
- 1862-1872. Main's Radcliffe Observations. (Main.)
- 1863, 1864. The Paris Observations of Latitude Stars. (LeV. 63; LeV. 64.)
1864. The Greenwich Seven-Year Catalogue for 1864. (Ay. 64.)
- 1868-1873. The Greenwich Annual Volumes. (Ay. 68—Ay. 73.)
- 1870-1873. The Washington Observations, from 1866 to 1873 inclusive. (Wn. with year.)
1875. The Pulcova Observations of Auxiliary Fundamental Stars (Pulc.), published in the *Vierteljahrsschrift der Astronomischen Gesellschaft*.

There are various other star-places used, generally mentioned in the notes.

It is, of course, to be understood that many observations are made several years from their epoch. Gould's D'Agelet is derived from observations from 1783 to 1785; Struve's Positiones Mediæ, from observations up to 1843, inclusive; Rümker's catalogue, from observations up to 1847, at least; Professor Yarnall's and

the Armagh catalogues give positions often referred to an equinox more than ten years from their date. The systematic corrections to a common standard, which I have used in declinations only, are a combination of various materials, and not altogether homogeneous. In general, they agree with Professor Auwers's system up to 30° of north declination; from 30° to 60° , they are more nearly in accordance with Airy's catalogue for 1864; and from 60° to 70° are about a mean between those necessary to reduce to the two Greenwich seven-year catalogues of 1860 and 1864. Bessel's precessions have been used; for proper motion I have employed Mädler's values (or an approximation of my own) in right ascension, which is given only provisionally, and in declination have determined the value adopted by comparison of modern observations with ancient. For Bradley's stars I have thought it sufficient, in most cases, to use Professor Auwers's corrected values of declination mentioned above; only when the star was little observed by Bradley I have added Piazzzi, Groombridge, or more recent determinations. In reducing Bradley's stars, I have generally employed Mädler's values (sometimes omitting his proper motion) of precession and secular variation, which, for my purpose, are accurate enough. His secular variations are mostly computed for 1802.5 (as it seems) by comparison of Bessel's precessions of 1755 with Mädler's own for 1850. The precession constants are as follows :

Bessel.					Struve—Peters.		
	m	$\frac{m}{15}$	n	Log. n	m	n	Log. n
1750	" 46. 0282	s. 3. 06855	" 20. 0644	1. 302427	" 46. 0481	" 20. 0650	1. 302439
60	. 0313	. 06876	. 0634	406	. 0509	. 0642	421
70	. 0344	. 06896	. 0625	385	. 0538	. 0633	402
80	. 0375	. 06917	. 0615	364	. 0566	. 0624	383
90	. 0406	. 06937	. 0605	343	. 0595	. 0616	365
1800	. 0437	. 06958	. 0596	322	. 0623	. 0607	346
10	. 0468	. 06978	. 0586	301	. 0651	. 0598	327
20	. 0498	. 06999	. 0576	280	. 0680	. 0590	309
30	. 0529	. 07020	. 0567	259	. 0708	. 0581	290
40	. 0560	. 07040	. 0557	238	. 0737	. 0572	271
50	. 0591	. 07061	. 0547	217	. 0765	. 0564	253
60	. 0622	. 07081	. 0537	196	. 0794	. 0555	234
70	. 0653	. 07102	. 0528	175	. 0822	. 0547	215
80	. 0684	. 07122	. 0518	154	. 0851	. 0538	197
90	. 0715	. 07143	. 0508	133	. 0879	. 0529	178
1900	46. 0745	3. 07164	20. 0499	1. 302112	46. 0908	20. 0521	1. 302159

The formulæ for secular variation are, as given by Menten :

$$100 \frac{d^2\alpha}{dt^2} = A + B \tan \delta + C \tan \delta^2$$

$$100 \frac{d^2\delta}{dt^2} = A' + B' \tan \delta$$

in which, employing Bessel's constants for 1860,

$$A = 0''.00206 + 0''.00650 \sin 2\alpha = 0''.00206 + \frac{1}{2} C$$

$$B = [8.4750] \cos \alpha + [6.811 n] \sin \alpha$$

$$C = [8.1139] \sin 2\alpha$$

$$A' = -0''.0097 \cos \alpha - 0''.4479 \sin \alpha$$

$$B' = [9.2900 n] \sin \alpha^2$$

For non-Bradley stars I have generally, for the zones here first computed (10° to 30° and 60° to 70°) compared all the thoroughly good observations, omitting the older zones where better material was at hand and they could be spared. Generally I employed a very close approximation to the method of least squares chiefly by forming normals, unless a single good old authority were at hand, when it was sometimes thought sufficient to compare it with the mean by the weights of the good modern determinations. If, for instance, I had only Groombridge, 1810, and three or four determinations (H., RC., Ja., Pulc.,) about 1845, the mean of these last was at once taken to compare with Groombridge.

Where this process gave a certain proper motion, I should not hesitate to use it, but at the same time place the star, if not more recently observed, in Class C; in many cases the value of proper motion was so small and doubtful that I thought it safest to give the mean of the modern authorities brought up without proper motion as the position for 1875. This is especially true in cases where the star is among those discussed in 1873. But, in these cases, a re-observation should precede the final revision, as the question of proper motion or no proper motion would thus be at once settled.

For simplicity's sake, I have often given the proper motions in declination to two places of decimals only, save where the star was a well-determined one of Bradley's. But in all cases the annual precession in declination was computed to three decimals at least.

No use was made (save in a few cases) of Mädler's declination in taking the means. His value is given as a check on the proper motion. Where it seemed best, the separate observations from which he calculated it have been used; but in the great majority of cases there were so much newer and better ones at hand that this was needless.

The right ascensions throughout are provisional, but will serve a good purpose where they are derived from numerous late observations. For the stars given in my previous catalogue, I have not here presented the details; for which reference may be made to that catalogue, and the notes to this one.

Field-observers will mostly use the catalogue of 539 stars, published at Berlin, in their longitude work; for many of the stars there given there are right ascensions in this volume which include newer observations, and are, I think, better. I am now publishing an extensive series of right ascensions, observed by myself and others at Cambridge, about 1864; and Mr. Rogers is also printing his later results, so that I shall recur to this subject elsewhere.

For telegraphic longitude work the present volume supplies sufficiently accurate values, if care be taken to omit ill-determined stars. Those classed as AA or A in declination will be found good enough in right ascension.

In combining the positions, I have generally employed Argelander's rule, giving to a modern determination from—

- 1 observation, a weight $\frac{1}{2}$;
- 2 observations, a weight $\frac{3}{4}$;
- 3 to 8 observations, a weight 1;
- 9 or more observations, a weight $1\frac{1}{2}$ or 2.

The determinations, brought up to 1875, as given in the details of positions, to which no figure is subscribed, and to which there is no note, have, according to this rule, been entitled to the unit of weight.

Argelander generally gives Piazz's a weight = 1; the value *one-half* is much nearer the truth; in general, he assigns rather a larger relative weight to the older and poorer observations than they deserve. But this is mostly compensated by the number of determinations. Had I received the Pulcova observations, from 1840

to 1855, earlier, I should have given them double weight throughout, and have employed their right ascensions. Since completing the present volume I have made other studies into the weights to be assigned.

The revision of the present catalogue by new observations need only be made for the class C. *All* the stars are included in the great zones now in progress; and there are also unreduced and unpublished observations expected from the observatories at Moscow, Pulcova, Armagh, Glasgow, and Madrid, as well as current work at Greenwich, Paris, Oxford, and Washington, which will go far toward filling any other lacunæ.

I have been convinced, by the present discussion, that the ordinary meridian work of observatories needs to be modified, if the accumulation of raw material undiscussed, and rendering discussion more and more difficult, is not to go on for an indefinite future. The subjects of stellar meridian observation in the northern hemisphere of the heavens now needing attention are these:

1. More thoroughly good fundamental determinations.
2. The observation (aside from the zones) of those of Heis's stars (*Atlas Cœlestis Novus*) which are not in the B. A. C., about 2,000 in number; these stars are as much needed as those in the B. A. C.
3. The revision of doubtful cases, such as those in Class C of the present work; in future, of stars which may become relatively doubtful from time to time.
4. The regular observation every few years of stars of decided proper motion.

Any other stellar observations need be only for special practical purposes.

In order to exhibit the general form of the discussion I will give here a few stars in detail:

B. A. C. 4826 (from the Lake Survey Catalogue) is a star of considerable proper motion, and was rediscussed in the fullest manner. The original authorities are:

Authority.	Equinox.	Epoch.	No. obs.	AR.	Decl.
				<i>h. m. s.</i>	
F	1790	-----	1	14 26 37.89	53° 49' 21.0"
Pi	1800	-----	7. 8 ¹	26 57.067	46 39.0
Gauss	1827	1827.4	1. 22 ²	27 50.42	39 33.02
Hansen	1827	1827.4	0. 9 ³	-----	39 33.40
C. A	1830	1830.	8	27 56.37	38 47.7
T	1835	-----	3. 4	28 6.40	37 25.60
Rii	1841	1841.	3 ⁴	28 17.750	35 53.12
RC	1845	1849.7	3	28 25.64	-----
		1845.	3 ⁵	-----	34 49.8
Arm	1840	1850.2	5	-----	36 11.80
		1853.4	2	28 15.46	-----
RC ₂	1860	1856.9	4	-----	30 53.9
		1858.1	3	28 54.91	-----
Q	1860	1860.38	2	28 55.15	30 54.1
Yarn	1860	1862.4	2	28 55.06	30 54.4

¹ 7 observations in AR; 8 in declination. ² Observations in declination made with Ramsden's zenith-sector. ³ Zenith distances at Gotha, page 77 of Gauss's dissertation "*Bestimmung des Breitenunterschiedes*" combined with the latitude of Gotha and flexure from the same dissertation. ⁴ Page 143 of the catalogue. ⁵ Reduced with P. M. + 0".30.

For AR. I shall use at first the precession and proper motion of the Åbo catalogue, namely:

Prec. for 1830 $+1^{\circ}.9772$

P. M. for 1830 $-0^{\circ}.021$

Sec. variation $-0^{\circ}.0009$

A. variation 1830 $+1^{\circ}.9562$

With this, I get for 1875.0.

	Prec. + P. M.	Red. to Epoch.		S. C.	Reduced with S. C.
	<i>m.</i> <i>s.</i>			<i>s.</i>	
F	+ 2 46.28		14 29 24.17	+ 0.026	24.20
Pi	+ 2 26.71		(23.78)	+ 0.336	(24.12)
Gauss	+ 1 33.89		24.31	+ 0.042	24.35
C. A.	+ 1 28.02		24.39	+ 0.038	24.43
T	+ 1 18.24		(24.64)	+ 0.065	24.70
Rü	+ 1 6.50		24.25	+ 0.017	24.27
RC	+ 58.67	+ 0.10	24.41	+ 0.014	24.42
Arm	+ 1 8.46	+ 0.28	24.20	+ 0.045	24.24
RC ₂	+ 29.34	- 0.04	24.21	- 0.08 ?	24.13
Q	+ 29.34	+ 0.01	24.50	+ 0.076	24.58
Yarn	+ 29.34	+ 0.05	24.45	+ 0.028	24.48

There seems to be no reason to change the proper motion of the Åbo catalogue, as the mean of the observations since 1840, with systematic correction, allowing Arm., Q., and Yarn. a weight $\frac{3}{4}$ each, is $24^{\circ}.34$ for about 1853.5; while C. A. for 1830 gives $24^{\circ}.43$; Gauss, 1827, $24^{\circ}.35$; Fedorenko, 1790, $24^{\circ}.20$, and Pi. $24^{\circ}.12$, without allowing for the difference between his date of observation and 1800; so that it is not seen whether the P. M. is to be increased or diminished. The three latest authorities, with proper weights 1, $\frac{3}{4}$, $\frac{3}{4}$, give $24^{\circ}.37$. The value given in the Lake Survey Catalogue (without systematic correction) is $24^{\circ}.31$, and proper motion $-0^{\circ}.019$, not including the authorities C. A., Q., and Yarn., which were not accessible to me in compiling it.

[The process which I have commonly employed, of assigning a proper motion in right ascension, is a more summary one. Systematic corrections were only used when very certain and important, as in case of Piazzini.]

For declinations I employ—

Precession for 1875: Star Tables of the American Ephemeris... $-15''.9434$

Correction for 1875..... $+ 33$

Precession for 1875..... $-15''.9401$

Secular variation for 1830 (Åbo catalogue)..... $+ 0''.180$

The precession is verified in this case by subtracting 0.45 of the secular variation, reducing it to 1830, which gives $-16''.021$, agreeing with Argelander.

Reduction of declinations.

		Precession.	Systematic correction.	1875.0.	Ep.	Wt.
F.....	$85 \times \text{prec. for } 1832.5 = 85 \times -16''.0165$	$-22' 41''.4$	$0''.0$	$53^{\circ} 26' 39''.6$	(1790)	$\frac{1}{4}$
Pi.....	75×-16.0075	$20' 0.56$	$+0.37$	38.8	(1800)	1
Gauss..	48×-15.9833	$12' 47.20$	$+0.5$	46.3	1827.4	2
Hansen	Ditto	-----	$+0.5$	46.7	27.4	$1\frac{1}{2}$
C. A...	45×15.9806	$11' 59.13$	$+0.02$	48.6	50	$1\frac{1}{2}$
T.....	40×15.9761	$10' 39.04$	$+0.59$	47.2	35	1
Rü....	34×15.9707	$9' 3.00$	-0.69	49.4	41	1
RC....	30×15.9671	$7' 59.01$	$+0.27$	51.1	45	1
Arm....	35×15.9716	$9' 19.01$	-0.53	52.3	50.2	1
RC ₂ ...	15×15.9536	$3' 59.30$	$+0.05$	54.6	58.1	1
Q.....	Ditto	-----	0.0	54.8	60.4	$\frac{3}{4}$
Yarn...	Ditto	-----	0.0	55.1	62.4	$\frac{3}{4}$

Combining neighboring observations into normals, we have the seconds of declination:

1798	$38''.96$	Wt. $1\frac{1}{4}$
1828.2	47.11	5
1842.8	50.00	4
1860.1	54.81	$2\frac{1}{2}$

Hence for 1836.07 the most probable declination is $48''.73$, and the proper motion for

38.07 years	$= 9''.77$
7.87	1.62
6.73	1.27
24.03	6.08

For one year—

$0''.257$	Wt. $1\frac{1}{4}$ $(38.07)^2 = 1811$
0.206	5 $(7.87)^2 = 310$
0.189	4 $(6.73)^2 = 181$
0.253	$2\frac{1}{2}$ $(24.03)^2 = 1444$

Or, combined, and omitting the third decimal, $0''.25$ yearly. The final result for 1875 will then be

$$53^{\circ} 26' 58''.46.$$

The separate observations brought up with the P. M. $0''.25$ are

		c.—o.
F.....	$53^{\circ} 27' 0''.8$	$-2''.3$
Pi.....	$26' 57.6$	$+0.9$
Gauss...	58.2	$+0.3$
Hansen..	58.6	-0.1
C. A....	59.8	-1.3
T.....	57.2	$+1.3$
Rü.....	57.9	$+0.6$
RC.....	58.6	-0.1
Arm....	58.5	0.0
RC ₂	58.8	-0.3
Q.....	58.5	0.0
Yarn....	58.3	$+0.2$

The probable error of weight = 1 is therefore

$$\pm 0''.57 \text{ by sums of squares}$$

$$\pm 0.51 \text{ by sums of errors}$$

As the proper motion is so considerable, I examined Piazzzi's *Storia Celeste* to find the epochs of his observations, but found that six of them were made in May, 1796, and the remaining two in May, 1810. The correction for proper motion to 1800 is, then, very trifling. In like manner, I found that Taylor had observed the star either in 1834 or 1835. The remaining C—O ($-1''.3$) for Argelander's *Åbo* catalogue is very remarkable, as the positions of that catalogue are so exact that, in general, they deserve a double weight.

The star B. A. C. 5271 (χ Herculis) is a Bradley star of considerable proper motion, once only observed by Bradley in declination. The reduction to 1875 (in declination) was first effected by Mädler's values of precession, proper motion, and secular variations, as follows:

$$1850: \text{Precession} + \text{proper motion (in declination)} = -10''.351$$

$$\text{Secular variation} \quad \quad \quad + 0.256$$

$$\text{Proper motion} \quad \quad \quad + 0.610$$

The late declinations used, as brought up to 1875.0, are

RC.....	42° 48' 9''.04	S. C. $-0''.15$	Result 8''.9	Weight 1
Pule.....	7.96	+ 0.9	8.9	1
Arm.....	11.69 ₂	-0.9	10.8 ₂	$\frac{3}{4}$
Yarn.....	6.56	0.0	6.6	1
Ay. 60.....	7.73	+ 0.2	7.9	1
RC ₂	8.41 ₁	-0.16	8.2 ₁	$\frac{1}{2}$
Main 72.....	7.79		7.8 ₂	$\frac{3}{4}$

By Ay. 60 is meant the seven-year catalogue for 1860; by Main 72, in this case, the Radcliffe observations for that year. In many cases the observations of several years are combined into one date.

The Armagh plan and Main 72 depend on two observations each; that noted RC₂ on one only. Assigning the weights given above, we have the mean value for 1875.0, 42° 48' 8''.4, depending on Mädler's proper motion.

Professor Auwers's reduction of Bradley, brought up to 1875, without proper motion, gives 42° 46' 54''.6 from one observation; it holds good for the epoch 1754.5. The difference, 42° 48' 8''.4 $-$ 42° 46' 54''.6, divided by 1875 $-$ 1754.5, or 120.5 years, gives $\frac{73''.8}{120.5}$, or 0''.612 for the annual proper motion. It is manifestly unnecessary to correct Mädler because of the new reduction of Bradley; but we must see whether the intermediate observations are represented.

With the proper motion + 0''.610, Groombridge gives 42° 48' 9''.2, and the *Åbo* catalogue 42° 48' 7''.6; the systematic corrections + 0''.4 and $-0''.3$ bring the results to 9''.6 and 7''.3, agreeing to $-1''.2$ and $+1''.1$ with the adopted value; there seems to be no need of change in the proper motion.

The modern observations used give the probable error to weight 1 = $\pm 0''.79$ by sums of errors, ± 0.81 by sums of squares; hence, the probable error for about 1855 = $\pm 0''.33$, and assuming the P. E. of the yearly proper motion as 0''.01 for 1875, $\pm 0''.39$, unless we use the mean value $\pm 0''.50$ for the probable error of one determination, which would give $\pm 0''.29$ for 1875. The star is placed in Class B, especially on account of the unusual discrepancy of the results. Fortunately, the omission of the larger discrepancies, Arm. $-2''.4$ and Yarn. $+1''.8$, will leave the final result unchanged.

If the proper motion given by Mädler had been changed, the variation would need to be *increased* in consequence of the error caused by using the uncorrected value to reduce to 1875.

The star B. A. C. 6867 = Piazzì XIX, 371 was observed also by Groombridge (2996). The precessions in declination as computed by Taylor's AR. for 1835, and that of the Lake Survey Catalogue for 1875, are—

$$\text{Prec. 1835} + 9''.4750$$

$$\text{Prec. 1875} + 9''.5325$$

These are approximately verified by the Radcliffe precession and secular variation ($+9''.49$ and $+0''.15$) for 1845; and the precession for 1837.5 is interpolated as $9''.4786$, giving the total motion from 1800 to 1875 $11' 50''.89$, which, added to Piazzì's declination for 1800.0, $58^\circ 30' 55''.2$, gives, for 1875.0, $58^\circ 30' 46''.09$, or, with systematic correction $+0''.69$, $58^\circ 18' 46''.78$.

Groombridge's declination, as reduced to 1845, in the Radcliffe Catalogue, is $58^\circ 25' 59''.7$; 30 times the interpolated precession for 1860 ($+9''.5109$) is $4' 45''.33$; and the systematic correction for Groombridge $+1''.05$; Groombridge's declination for 1875, with systematic correction, is then $58^\circ 30' 46''.08$ for the epoch 1810.2. Giving Pi. and Gr. equal weights, we have, for about 1805, $58^\circ 30' 46''.43$, reduced by precession only to 1875. The more modern authorities, with systematic corrections, are (see Lake Survey Catalogue):

	S. C.	Lake Survey Catalogue.	With S. C.	
T	$+0''.7$	$58^\circ 30' 44''.4$	$45''.1$	(Including Ay. 40.) (Double weight.)
Ay. 45 ...	$+0.1$	46.6	46.7	
H	0.0	45.6	45.6	
RC	$+0.8$	45.5	46.3	
Arm	-0.1	46.9	46.8	
Mean			46.2	

The proper motion is thus seen to be very small; the mean of the modern authorities differs only $0''.23$ from that of the two ancient ones. It will be safer to assume no proper motion, and $58^\circ 30' 46''.2$ for the declination for 1875.0; but the star is classed as C, the latest authority being about 1844.

There is, however, a slightly later determination (Pulcova, 1846 and 1847), and a scattered observation or so at Brussels, which agree well enough. From the data here given, the probable error of one determination is about $\pm 0''.50$, and that of the declination for 1875 about $\pm 0''.57$, strictly referring, however, to the value $58^\circ 30' 46''.0$, which would be obtained by calculating the proper motion.

Pulcova gives for 1846.0: $58^\circ 26' 9''.66$ Reduced to 1845: $0''.17$

9 .50 0 .01

8 .17 25' 58 .68

1847.0: 18 .83 59 .85

19 .63 26 0 .65

$58^\circ 25' 59''.87$

Precession, 1845–1875, 4 45 .33

Systematic correction, + 0 .90

$58^\circ 30' 46''.10$

The star needs but a good determination by three or four observations to be placed at once in Class B, and its position can be now used without much hesitation; but there is some uncertainty in its reduction

to 1875 for a space of nearly thirty years in the most favorable case. It is finally placed in Class C, to indicate the need of newer observations rather than on account of its absolute uncertainty. The stars classed C are of very various degrees of accuracy, and therefore less proper to use in any case, as their probable errors are often hard to estimate. Such of them, for instance, as have been determined with precision only by Groombridge, and in the Radcliffe Catalogue, or even with the addition of Jacob, are sometimes quite uncertain. With stars of this class I have been (as before mentioned) necessarily pretty free to assume a proper motion equal to zero, as this, in such cases, often gives better results than to determine it by least squares, which often gives quite illusory values in so ill-conditioned work. The true course is to re-observe the stars, as before suggested. This, if *thoroughly well* done, at once utilizes all the older observations, and shows whether the slight indications of proper motion are due to errors of observation or no. For another case in point, we may take B. A. C. 6311 = Gr. 2584. The observations, as reduced to 1875, are (see Lake Survey Catalogue):

Gr.	59° 37' 38".05	S. C. + 0".97
RC.	40 .5	+ 0 .8
Arm.	38 .4	0 .0
Ja.	38 .5	+ 0 .6

We might be tempted to think that there is a P.M. of perhaps + 0".02; but, with the systematic corrections, the mean of the three modern determinations is 59° 37' 39".6, and Washington, 1872, with its systematic correction of —0".2, gives 59° 37' 39".3, or the proper motion above indicated is not confirmed even as to direction. Assuming no proper motion, the mean of the four more recent determinations is 39".5; the tenth of a second would be altered to 39".4 if Groombridge were included, which was done for the purpose of calculating the probable error of one declination. This was about $\pm 0".74$; usually it has been found about $\pm 0".50$. The star is classed B.

The details of the revision of the Lake Survey Catalogue differ from those given in that work, as follows:

In this book, proper motion is included where given in the final catalogue; in that, only where the star is determined by Mädler. Moreover, systematic corrections were there used only in part, but are here employed, *and have been applied* in the details, which was not so before. The systematic corrections employed were mostly derived from Professor Auwers's paper in A. N. with the addition, for the epoch 1860, of the following values:

Decl.
10° to 40° 0".00
50 + 0 .15
60 + 0 .30
70 + 0 .26

These values were diminished in proportion to the length of time since 1755; were multiplied by

$$\frac{t - 1755}{105}$$

For the authorities of 1860 and later, the following values were used, though not very consistently in some cases, approximations having been at first employed:

		1860	1864	1868-73
Airy	10 to 30	+ 0".4	+ 0".2	— 0".2
	30 to 40	+ 0 .3	+ 0 .1	— 0 .25
	40 to 60	+ 0 .2	0 .0	— 0 .25
	60 to 70	+ 0 .2	— 0 .1	— 0 .3

For Main, I had some trouble in assigning true corrections.

I used for 1862 to 1867:

—0''.84 for 10°
 — 0 .63 for 20
 — 0 .29 for 30
 0 from 30° to 70°

From 1868 to 1872 no correction at all.

For Smyth, I employed:

+ 0''.5 from 10° to 20°
 + 0 .4 from 20 to 30
 + 0 .7 from 30 to 60
 + 0 .6 from 60 to 70

For Quetelet, at first, —0''.3 from 10° to 20°, and —0''.4 from 20° to 30°; afterward, and in other declinations, none.

For the Pulcova *fundamental* Catalogue, +0''.4; and for the Meridian Circle Observations (Vol. VI), +0''.9. This last value should be less near the zenith. I used +0''.3 for a few stars north of 60°, which Vice-Director Wagner kindly sent me.

For Schjellerup and Yarnall, I used no systematic correction; so also for Argelauder's, Bonn, and Engelmann's Leipzig observations.

The admirable Leiden series was corrected by:

—0''.1 from 40° to 50°
 — 0 .2 from 50 to 60
 — 0 .4 from 60 to 70

For the Washington Transit Circle Observations, the following are the systematic corrections employed:

	1866-67	1872	1873
10° to 20°	+ 0''.8	— 0''.8	+ 1''.67
20 to 30	+ 0.8	— 0.4	+ 1.4
30 to 40	+ 0.6*	— 0.4	+ 1.3
40 to 50	0.*	— 0.2	+ 0.9
50 to 60	0.	— 0.2	+ 0.6
60 to 70	— 0.2	— 0.2	

* From 34° to 44°, the correction was interpolated between 0''.6 and 0''.0.

In conclusion, I may remark that experience has shown the importance of keeping a continual watch over predicted star-positions, owing in part to the uncertainty of the older observations, and the consequent difficulty of the prediction; it will, therefore, be well if any suspected stars are immediately made known to me, in order that any discrepancies may be detected by the newer observations now published and in progress.

I remain, sir, very respectfully, yours,

T. H. SAFFORD.

CATALOGUE OF STARS.



17

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				<i>h. m. s.</i>	<i>s.</i>	<i>s.</i>	<i>° ' "</i>	<i>"</i>	<i>"</i>				
1	4079	7.7	C	12 0 47.77	+3.070	-	10 21 33.1	-20.05	-	1.3022 _n	7.5429	9.6309	9.2548 _n
2	4081	8.2	B	1 12.74	3.069	-	14 12 45.0	20.05	-	1.3022 _n	7.7244	9.6252	9.3901 _n
3	Gr. 1854	7.0	C	3 08	3.1	-	39 19 48.9	20.05	-	1.3021 _n	8.1355	9.5369	9.8019 _n
4	4099	6.7*	A	4 09.29	3.063	-	17 30 18.6	20.05	+0.008	1.3021 _n	8.2583	9.6225	9.4782 _n
5	4100	6.7*	B	12 4 24.93	+3.058	-	27 58 38.0	-20.05	-0.05	1.3021 _n	8.2848	9.5935	9.6712 _n
6	4108	6.5	B	12 5 30.28	+3.020	-0.004	57 45 02.0	-20.05	-0.016	1.3020 _n	8.3806	9.4011	9.9271 _n
7	4107	6*	A	5 30.51	3.055	-0.004	26 34 00.5	20.05	0.033	1.3020 _n	8.3808	9.6008	9.6504 _n
8	4110	6*	A	5 47.82	3.058	-	21 14 17.8	20.05	0.020	1.3020 _n	8.4030	9.6166	9.5589 _n
9	4114	6*	A	7 04.01	3.064	-0.005	10 57 28.6	20.04	0.012	1.3020 _n	8.4889	9.6362	9.2788 _n
10	4121	6.7*	A	12 8 31.26	+3.002	+0.003	54 07 48.9	-20.04	-0.03	1.3019 _n	8.5702	9.4539	9.9034 _n
11	4123	4.3*	A	12 9 13.97	+2.986	+0.019	57 43 38.2	-20.04	0.00	1.3018 _n	8.6051	9.4244	9.9268 _n
12	4125	5*	A	9 39.27	3.055	-0.004	15 35 42.4	20.04	-0.012	1.3018 _n	8.6244	9.6327	9.4291 _n
13	4126	5.6*	A	9 51.47	3.021	+0.003	41 21 21.8	20.03	0.035	1.3018 _n	8.6335	9.5491	9.8196 _n
14	4127	5.6*	A	10 00.96	3.044	-	24 38 25.5	20.04	0.040	1.3018 _n	8.6404	9.6155	9.6197 _n
15	4128	5*	B	12 10 12.97	+3.031	-	33 45 37.8	-20.03	-0.07	1.3017 _n	8.6490	9.5860	9.7444 _n
16	10 Heis Com.	6*	C	12 11 13	+3.0	-	29 37 49.2	-20.03	-	1.3016 _n	8.6895	9.6035	9.6936 _n
17	Rü. 3894	7.0	C	11 23	3.1	-	15 50 27.7	20.03	-	1.3016 _n	8.6959	9.6344	9.4356 _n
18	4139	6.6	B	12 43.71	3.034	-	20 42 10.8	20.03	-0.03	1.3015 _n	8.7444	9.6155	9.6519 _n
19	4141	6.7*	A	13 00.36	3.038	-	23 43 44.9	20.02	-0.015	1.3015 _n	8.7537	9.6233	9.6040 _n
20	4142	6.5	A	12 13 13.76	+3.028	-0.015	28 51 19.6	-20.02	-0.138	1.3014 _n	8.7611	9.6105	9.6829 _n
21	4147	7.0	B	12 13 33.30	+3.027	-	29 09 31.3	-20.02	-0.009	1.3014 _n	8.7717	9.6104	9.6870 _n
22	4148	5.6*	B	13 38.88	2.978	+0.001	49 40 41.4	20.02	0.00	1.3014 _n	8.7746	9.5134	9.8814 _n
23	Gr. 1867	6.5	C	14 00	3.0	-	38 35 47.4	20.02	-	1.3014 _n	8.7856	9.5766	9.7943 _n
24	4152	6.7*	B	14 01.31	3.030	-	26 41 44.1	20.02	+0.03	1.3014 _n	8.7863	9.6182	9.6517 _n
25	4153	6.2	C	12 14 02.52	+3.029	-	27 19 02.0	-20.02	-0.13	1.3013 _n	8.7872	9.6166	9.6609 _n
26	4156	5*	A	12 14 24.03	+3.043	-0.007	18 29 01.4	-20.01	+0.026	1.3013 _n	8.7979	9.6349	9.5002 _n
27	3921	6.5	C	14 29	3.0	-	16 14 06.3	20.01	-	1.3013 _n	8.8004	9.6377	9.4456 _n
28	4159	6*	B	14 46.98	2.930	+0.007	58 33 37.1	20.01	-0.081	1.3013 _n	8.8093	9.4492	9.9302 _n
29	57	6*	C	15 54	3.0	-	25 28 04.2	20.01	-	1.3011 _n	8.8409	9.6248	9.6234 _n
30	XII, 4169	5*	A	12 16 13.18	+3.024	-0.001	26 32 24.5	-20.00	+0.004	1.3011 _n	8.8495	9.6230	9.6490 _n
31	4177	6*	A	12 17 37.76	+2.975	-0.006	43 14 07.1	-19.99	0.00	1.3009 _n	8.8856	9.5667	9.8344 _n
32	4178	7.0	B	17 47.01	3.019	-	26 32 41.2	19.99	0.00	1.3009 _n	8.8894	9.6261	9.6489 _n
33	4180	5.6*	A	17 56.51	2.936	-0.003	52 15 17.3	19.99	0.00	1.3008 _n	8.8932	9.5151	9.8967 _n
34	4181	5.6*	B	18 02.17	3.018	-0.001	26 47 31.0	19.99	-0.022	1.3008 _n	8.8955	9.6261	9.6526 _n
35	4184	6.7*	A	12 18 57.69	+3.020	+0.005	24 37 13.4	-19.98	-0.05	1.3007 _n	8.9172	9.6323	9.6182 _n
36	4185	6.7*	C	12 19 04.14	+2.896	-0.004	57 28 15.4	-19.98	-0.036	1.3007 _n	8.9196	9.4821	9.9244 _n
37	Gr. 1888	6.0	B	19 15.88	2.836	-	64 29 43.9	19.98	-	1.3006 _n	8.9241	9.4193	9.9539 _n
38	4188	5.6*	A	19 41.28	2.976	-0.006	39 42 43.9	19.98	-0.048	1.3006 _n	8.9335	9.5934	9.8036 _n
39	4191	5*	A	20 08.93	3.009	+0.001	27 57 39.3	19.98	0.020	1.3005 _n	8.9435	9.6278	9.6694 _n
40	4194	6.7*	B	12 20 33.18	+2.894	+0.002	55 51 04.5	-19.97	-0.005	1.3004 _n	8.9521	9.5020	9.9161 _n
41	4195	4.5*	A	12 20 42.35	+3.004	-0.005	28 57 48.9	-19.97	-0.082	1.3004 _n	8.9553	9.6267	9.6833 _n
42	4196	5*	B	20 44.22	3.008	-	27 31 05.1	19.97	-0.011	1.3004 _n	8.9560	9.6300	9.6629 _n
43	4199	6.5	A	21 23.19	3.009	-	26 36 16.4	19.97	0.00	1.3003 _n	8.9693	9.6331	9.6492 _n
44	Gr. 1894	6*	C	21 25	3.0	-	42 02 51.4	19.96	-	1.3003 _n	8.9700	9.5851	9.8240 _n
45	4203	6.5*	B	12 21 37.83	+2.881	-0.005	56 24 17.7	-19.96	-0.035	1.3002 _n	8.9742	9.5032	9.9187 _n
46	4205	6.5	B	12 22 23.51	+3.005	-	26 55 8.3	-19.96	0.00	1.3001 _n	8.9892	9.6345	9.6533 _n
47	4206	7.2	B	22 29.85	3.006	-	26 35 30.4	19.96	0.00	1.3001 _n	8.9913	9.6354	9.6488 _n
48	4207	5.6*	A	22 40.13	3.006	+0.001	26 36 19.0	19.96	-0.005	1.3000 _n	8.9945	9.6358	9.6490 _n
49	4209	6*	C	23 11.77	3.009	-	24 48 01.2	19.95	-	1.2999 _n	9.0046	9.6398	9.6205 _n
50	4212	6*	A	12 23 26.46	+3.017	+0.009	21 35 18.6	-19.95	-0.027	1.2999 _n	9.0090	9.6444	9.5635 _n
51	4216	5.6*	A	12 24 06.68	+2.837	-0.005	59 05 37.2	-19.94	+0.064	1.2998 _n	9.0212	9.4955	9.9311 _n
52	4217	6*	B	24 07.89	2.889	-0.024	52 13 31.5	19.94	-0.016	1.2998 _n	9.0216	9.5427	9.8954 _n
53	4219	6.7*	B	24 12.48	2.832	-	59 27 33.7	19.94	0.02	1.2997 _n	9.0230	9.4932	9.9327 _n
54	4218	8.0	B	24 12.66	3.045	-	10 24 31.1	19.94	0.055	1.2997 _n	9.0230	9.6491	9.2544 _n
55	4222	5*	A	12 24 37.63	+2.695	+0.003	69 53 38.0	-19.94	-0.08	1.2997 _n	9.0304	9.3977	9.9702 _n
56	4223	6.5*	A	12 24 46.02	+3.003	+0.002	25 15 30.4	-19.94	-0.013	1.2996 _n	9.0328	9.6419	9.6276 _n
57	Gr. 1903	6*	B	24 52.91	2.873	-0.001	53 45 41.5	19.93	+0.201	1.2996 _n	9.0349	9.5364	9.9041 _n
58	4228	6.7*	A	26 43.24	3.041	-0.003	10 59 08.0	19.92	-0.007	1.2992 _n	9.0657	9.6514	9.2771 _n
59	4231	7.3	A	27 18.38	2.996	-	25 08 19.3	19.91	0.00	1.2991 _n	9.0751	9.6467	9.6251 _n
60	4232	6.7*	A	12 27 20.29	+2.997	-0.003	24 58 23.3	-19.91	-0.007	1.2990 _n	9.0756	9.6470	9.6224 _n
61	4233	5.6*	A	12 27 29.44	+2.963	-	33 56 19.5	-19.91	-0.03	1.2990 _n	9.0779	9.6302	9.7447 _n
62	4235	4.5*	A	27 48.19	2.925	-0.063	42 02 13.1	19.90	+0.291	1.2990 _n	9.0828	9.6056	9.8226 _n
63	4240	5*	A	28 37.32	2.999	-	23 19 04.8	19.90	0.02	1.2988 _n	9.0954	9.6510	9.5941 _n
64	4241	{ 5* }	A	28 50.16	3.013	+0.003	19 03 55.9	19.89	0.023	1.2987 _n	9.0986	9.6542	9.5106 _n
65	4242	{ 5* }	A	12 28 51.58	+3.013	+0.003	19 03 55.5	-19.89	+0.023	1.2987 _n	9.0990	9.6543	9.5106 _n

(53) = B. A. C. 4219, (75 Ursæ.) This star belongs properly in Class C.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. α' .	Log. β' .	Log. ϵ' .	Log. δ' .
				<i>h. m. s.</i>			<i>° ' "</i>						
66	Gr.	4244	7.0	B	12 29 04.40	+2.943	37 06 52.4	-19.89		1.2986 n	9.1021	9.6257	9.7771 n
67		1907	7.0	C	29 43	2.9	40 22 23.9	19.88		1.2985 n	9.1117	9.6174	9.8078 n
68		4248	6*	A	30 42.23	3.014	17 46 43.0	19.87	-0.026	1.2983 n	9.1257	9.6570	9.4789 n
69		4258	6*	B	32 45.14	2.902	41 33 45.5	19.85	-0.001	1.2977 n	9.1536	9.6226	9.8173 n
70		148	6.7*	C	12 32 50	+3	23 20 51.0	-19.85	-0.03	1.2977 n	9.1547	9.6580	9.5936 n
71	19 Heis Can.	4260	6*	A	12 32 54.15	+2.995	21 45 01.7	-19.85	-0.009	1.2977 n	9.1556	9.6590	9.5644 n
72		4267	7.0	A	33 12	2.9	36 38 22.4	19.84		1.2976 n	9.1594	9.6378	9.7712 n
73		4271	5*	A	35 33.43	3.031	11 06 44.7	19.82	-0.013	1.2970 n	9.1855	9.6583	9.2798 n
74		4271	5*	A	35 33.43	3.031	10 55 29.8	19.81	0.096	1.2969 n	9.1890	9.6583	9.2724 n
75		4276	6*	A	12 36 05.81	+2.652	63 23 58.4	-19.80	-0.03	1.2968 n	9.1955	9.5244	9.9460 n
76	XII, Gr.	166	8.1	C	12 36 57	+3.0	10 47 16.4	-19.79	-0.04	1.2965 n	9.2056	9.6592	9.2660 n
77		1918	6.7*	C	37 35	2.7	61 50 22.0	19.78		1.2963 n	9.2129	9.5425	9.9394 n
78		2904	8.1	C	38 04	2.7	59 33 20.1	19.78		1.2961 n	9.2184	9.5592	9.9206 n
79		4282	6*	B	38 32.87	2.849	44 47 15.6	19.77		1.2960 n	9.2238	9.6293	9.8417 n
80		2135	7.2	B	12 38 34.23	+2.780	52 27 01.2	-19.77	-0.167	1.2960 n	9.2240	9.5990	9.8930 n
81		4285	6.5*	A	39 04.43	+2.881	39 57 30.2	-19.76	+0.148	1.2958 n	9.2296	9.6450	9.8014 n
82		4287	5.6*	B	39 15.08	2.834	46 07 26.6	19.76	+0.02	1.2958 n	9.2315	9.6269	9.8514 n
83		4288	6*	B	40 01.47	3.029	10 14 20.8	19.75	-0.453	1.2955 n	9.2399	9.6607	9.2132 n
84		4290	5*	C	40 23.99	2.998	17 15 38.1	19.74		1.2954 n	9.2440	9.6687	9.4656 n
85		4292	6.7*	A	12 40 56.00	+3.018	12 38 30.8	-19.74	-0.024	1.2952 n	9.2496	9.6649	9.3332 n
86	Gr.	4360	6.6*	B	12 41 58.22	+2.584	63 27 49.8	-19.72	-0.02	1.2948 n	9.2603	9.5524	9.9443 n
87		4299	6.7*	A	41 58.63	3.009	14 14 12.4	19.72	-0.027	1.2948 n	9.2604	9.6678	9.3825 n
88		1925	6.7*	C	42 05	2.8	50 50 24.5	19.72		1.2948 n	9.2615	9.6187	9.8822 n
89		4302	5.6*	A	42 27.28	2.477	67 28 23.0	19.71	-0.003	1.2947 n	9.2653	9.5268	9.9580 n
90		188	7.3	C	12 42 33	+3.0	12 47 00.5	-19.71	-0.13	1.2946 n	9.2662	9.6665	9.3374 n
91	XII,	4301	6.5*	A	12 42 38.33	+3.005	14 48 19.9	-19.71	-0.019	1.2946 n	9.2671	9.6691	9.3999 n
92		4303	6*	B	42 56.47	2.783	49 08 54.5	19.70	-0.003	1.2945 n	9.2701	9.6281	9.8711 n
93		4304	6*	A	43 11.92	2.936	28 14 00.8	19.70	+0.031	1.2944 n	9.2727	9.6729	9.6672 n
94		4305	6.7*	A	43 12.49	2.619	61 00 07.0	19.70	0.00	1.2944 n	9.2728	9.5732	9.9341 n
95		4311	5.6*	A	12 44 14.34	+2.869	38 11 50.4	-19.68		1.2940 n	9.2829	9.6624	9.7831 n
96	XII,	198	7.0	B	12 45 01.66	+2.977	19 50 28.0	-19.67		1.2937 n	9.2905	9.6761	9.5223 n
97		4315	5*	A	45 36.53	2.929	28 13 16.9	19.66	-0.024	1.2935 n	9.2960	9.6774	9.6661 n
98		202	6.7*	B	45 44.01	2.976	19 51 07.7	19.66		1.2935 n	9.2972	9.6771	9.5223 n
99		4318	5.7*	B	45 59.23	2.986	17 45 16.0	19.65	-0.006	1.2934 n	9.2995	9.6758	9.4754 n
100		4319	7.2	B	12 46 09.69	+2.985	17 47 22.3	-19.65	-0.055	1.2933 n	9.3012	9.6760	9.4762 n
101		4328	5*	A	12 47 08.37	+2.961	21 55 30.0	-19.63	-0.027	1.2929 n	9.3101	9.6801	9.5629 n
102		4329	6*	A	47 33.35	3.007	13 05 54.4	19.62	0.027	1.2927 n	9.3139	9.6714	9.3459 n
103		4335	2*	A	48 31.47	2.644	56 38 18.4	19.60	-0.044	1.2924 n	9.3225	9.6171	9.9120 n
104		4341	6*	C	49 13.78	2.756	47 52 30.1	19.59		1.2921 n	9.3287	9.6524	9.8601 n
105		4345	3.2*	A	12 50 09.46	+2.836	38 59 24.0	-19.57	+0.057	1.2917 n	9.3366	9.6757	9.7883 n
106	Gr.	4346	5*	AA	12 50 10.69	+2.836	38 59 38.1	-19.57	+0.057	1.2917 n	9.3368	9.6757	9.7883 n
107		4347	5*	A	50 29.58	2.411	66 07 00.7	19.57	-0.056	1.2915 n	9.3395	9.5746	9.9505 n
108		4348	6.7*	A	50 48.55	2.624	54 46 34.8	19.56	-0.016	1.2914 n	9.3422	9.6334	9.9014 n
109		1938	6.7*	C	50 52	2.8	44 13 43.1	19.56		1.2914 n	9.3427	9.6669	9.8328 n
110		4350	6*	C	12 51 25.06	+2.754	46 51 18.8	-19.55	-0.05	1.2911 n	9.3473	9.6618	9.8521 n
111	Gr.	1943	7.5	C	12 51 58	+2.3	69 17 38.0	-19.54		1.2909 n	9.3518	9.5608	9.9597 n
112		4351	5.0	A	52 44.51	2.971	18 05 01.8	19.52	+0.047	1.2906 n	9.3581	9.6842	9.4803 n
113		1946	7.2	C	53 32	2.3	69 22 54.9	19.51	+0.04	1.2902 n	9.3645	9.5675	9.9593 n
114		4360	5*	A	54 17.43	2.879	31 27 34.6	19.49	-0.017	1.2899 n	9.3705	9.6925	9.7052 n
115		39 Heis Can.	6.7*	C	12 54 27	+2.9	32 27 15.3	-19.49		1.2898 n	9.3717	9.6923	9.7173 n
116		4362	6.7*	A	12 54 58.76	+2.969	17 47 51.6	-19.48	-0.027	1.2895 n	9.3758	9.6864	9.4726 n
117		4365	5.6*	A	55 11.51	2.310	67 16 18.5	19.47	0.024	1.2894 n	9.3775	9.5884	9.9522 n
118		4366	6.5*	B	55 21.43	2.578	57 02 24.4	19.47	-0.072	1.2894 n	9.3788	9.6402	9.9110 n
119		4364	7.0	B	55 27.97	2.942	21 56 36.0	19.47		1.2893 n	9.3795	9.6920	9.5597 n
120		4367	3.2*	AA	12 55 57.28	+3.005	11 37 53.3	-19.46	+0.022	1.2891 n	9.3833	9.6755	9.2914 n
121	XII,	4371	6*	A	12 56 53.58	+2.389	64 16 55.6	-19.44	0.00	1.2886 n	9.3904	9.6124	9.9412 n
122		253	6.5	B	57 06.17	2.921	24 29 54.6	19.43	-0.02	1.2885 n	9.3920	9.6964	9.6041 n
123		4384	5*	A	59 53.70	2.816	36 28 05.4	19.37	+0.01	1.2872 n	9.4123	9.7011	9.7591 n
124		268	6.7*	C	13 0 13	2.9	29 41 57.8	19.36		1.2870 n	9.4145	9.7038	9.6798 n
125		4389	6*	C	13 0 14.52	+2.712	45 56 14.0	-19.36		1.2870 n	9.4147	9.6888	9.8413 n
126		4387	6*	A	13 0 15.65	+2.932	21 49 28.3	-19.36	-0.057	1.2870 n	9.4148	9.6985	9.5551 n
127		4388	6*	A	0 17.57	2.921	23 17 14.7	19.36	0.033	1.2870 n	9.4151	9.7001	9.5818 n
128		4390	5*	A	1 10.78	2.881	28 17 45.6	19.34	0.096	1.2865 n	9.4213	9.7051	9.6601 n
129		4392	6.7*	A	1 26.48	2.385	62 42 44.2	19.34	0.06	1.2864 n	9.4231	9.6378	9.9330 n
130		4393	6.8	B	13 1 54.55	+2.881	28 13 35.6	-19.33	-0.08	1.2861 n	9.4263	9.7063	9.6588 n

(96)=Pi. XII, 198. The A. R. is uncertain.

(98) Pi. XII, 202. Following of two components; the companion is about 0.8 preceding and 15".6 south.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. <i>a'</i> .	Log. <i>b'</i> .	Log. <i>c'</i> .	Log. <i>d'</i> .
				<i>h. m. s.</i>			<i>° ' "</i>						
131	4403	6.7*	A	13 3 39.15	+2.956	0.000	17 30 57.2	-19.28	0.00	1.2852 <i>n</i>	9.4380	9.6957	9.4616 <i>n</i>
132	4407	6.7*	A	3 52.82	2.783	-	3 05 22.8	19.28	+0.01	1.2851 <i>n</i>	9.4396	9.7086	9.7731 <i>n</i>
133	4406	5.4*	A	3 54.36	2.950	-0.030	18 11 28.1	19.28	+0.140	1.2851 <i>n</i>	9.4397	9.6974	9.4773 <i>n</i>
134	4408	6.3	B	3 56.81	2.771	+0.002	39 12 01.1	19.28	-0.004	1.2850 <i>n</i>	9.4400	9.7078	9.7836 <i>n</i>
135	4414	7.0	B	13 4 16.60	+2.767	-0.006	39 23 24.4	-19.27	0.00	1.2848 <i>n</i>	9.4421	9.7084	9.7852 <i>n</i>
136	4415	6.2	A	13 4 18.71	+2.770	-0.004	39 09 49.6	-19.27	+0.048	1.2848 <i>n</i>	9.4425	9.7087	9.7831 <i>n</i>
137	4416	6.7*	C	4 25.34	2.489	-	57 29 53.4	19.27	0.06	1.2848 <i>n</i>	9.4431	9.6694	9.9086 <i>n</i>
138	XIII, 12	6.7*	C	5 00	2.3	-	62 53 42.4	19.25	-0.05	1.2845 <i>n</i>	9.4469	9.6501	9.9318 <i>n</i>
139	4420	6.7	B	5 48.03	2.737	-0.001	41 27 27.2	19.23	-0.03	1.2840 <i>n</i>	9.4521	9.7098	9.8028 <i>n</i>
140	4421	4.5*	A	13 6 02.34	+2.865	-0.058	28 30 44.1	-19.23	+0.88	1.2839 <i>n</i>	9.4536	9.7134	9.6606 <i>n</i>
141	XIII, 14	6.5	C	13 6 08	+2.9	-	24 55 27.3	-19.22	-	1.2838 <i>n</i>	9.4542	9.7105	9.6064 <i>n</i>
142	4423	6.7*	B	6 19.72	2.988	-	12 13 17.9	19.22	-	1.2837 <i>n</i>	9.4554	9.6853	9.3073 <i>n</i>
143	XIII, 18	6.5	C	6 30	2.9	-	19 24 57.4	19.21	-	1.2836 <i>n</i>	9.4565	9.7027	9.5032 <i>n</i>
144	4433	5*	B	8 02.77	2.732	-	40 48 54.8	19.17	-	1.2827 <i>n</i>	9.4662	9.7157	9.7959 <i>n</i>
145	4438	5.6*	B	13 9 54.60	+2.716	-0.008	41 30 56.6	-19.13	-	1.2816 <i>n</i>	9.4776	9.7193	9.8009 <i>n</i>
146	XIII, 36	6.7*	C	13 10 29	+2.9	-	20 26 40.7	-19.11	-	1.2813 <i>n</i>	9.4810	9.7095	9.5223 <i>n</i>
147	4440	6.0	A	10 34.28	2.999	-0.021	10 04 40.2	19.11	+0.188	1.2812 <i>n</i>	9.4816	9.6814	9.2221 <i>n</i>
148	4444	6.5*	A	11 04.63	2.967	-	14 20 03.4	19.10	0.05	1.2809 <i>n</i>	9.4846	9.6054	9.3725 <i>n</i>
149	4448	7.8	C	11 27.96	2.966	-	14 25 22.2	19.09	0.03	1.2807 <i>n</i>	9.4869	9.6961	9.3754 <i>n</i>
150	4451	5.4*	A	13 11 56.12	+2.709	-0.010	41 13 52.5	-19.07	+0.029	1.2804 <i>n</i>	9.4896	9.7241	9.7972 <i>n</i>
151	4453	6.7*	B	13 12 40.24	+2.782	-	31 45 23.8	-19.06	-	1.2800 <i>n</i>	9.4939	9.7277	9.7337 <i>n</i>
152	4456	5*	B	12 55.35	2.569	-0.003	50 20 24.0	19.05	+0.003	1.2798 <i>n</i>	9.4953	9.7141	9.8640 <i>n</i>
153	4457	6*	A	13 19.20	2.768	-	35 47 06.3	19.04	-	1.2796 <i>n</i>	9.4976	9.7291	9.7443 <i>n</i>
154	4467	6.5*	B	14 42.77	2.701	-0.002	40 48 26.1	19.00	-0.006	1.2787 <i>n</i>	9.5055	9.7305	9.7918 <i>n</i>
155	4468	7.7	C	13 15 13	+2.957	-	14 48 20.6	-18.98	-	1.2783 <i>n</i>	9.5083	9.7006	9.3836 <i>n</i>
156	XIII, 71	6*	C	13 16 36	+2.6	-	44 33 27.2	-18.94	-	1.2774 <i>n</i>	9.5159	9.7318	9.8214 <i>n</i>
157	4479	6.0	A	18 13.75	2.725	-	37 41 13.9	18.90	-	1.2764 <i>n</i>	9.5247	9.7388	9.7605 <i>n</i>
158	4484	2*	A	18 53.40	2.413	+0.019	55 34 42.8	18.88	-0.032	1.2759 <i>n</i>	9.5282	9.7191	9.8902 <i>n</i>
159	4486	4.2	A	18 54.32	2.413	+0.019	55 34 31.1	18.88	-0.032	1.2759 <i>n</i>	9.5283	9.7191	9.8902 <i>n</i>
160	XIII, 77	6*	C	13 19 09	+2.9	-	24 30 23.8	-18.87	-	1.2757 <i>n</i>	9.5296	9.7285	9.5914 <i>n</i>
161	4493	5*	A	13 20 13	+2.401	+0.018	55 38 22.8	-18.84	-0.033	1.2750 <i>n</i>	9.5352	9.7226	9.8896 <i>n</i>
162	Gr. 1991	6*	C	20 55	2.6	-	46 40 45.4	18.82	-	1.2745 <i>n</i>	9.5388	9.7397	9.8342 <i>n</i>
163	4497	6.5	A	21 43.47	2.118	-0.056	63 54 12.5	18.79	+0.195	1.2739 <i>n</i>	9.5429	9.7027	9.9251 <i>n</i>
164	4499	5.6*	A	22 18.99	2.950	-0.016	14 26 49.5	18.77	-0.571	1.2735 <i>n</i>	9.5459	9.7058	9.3684 <i>n</i>
165	Gr. 1994	6*	C	13 22 55	+2.7	-	41 22 48.7	-18.75	-	1.2731 <i>n</i>	9.5490	9.7478	9.7912 <i>n</i>
166	4504	6*	A	13 23 01.44	+2.975	-0.003	11 28 01.9	-18.75	-0.040	1.2730 <i>n</i>	9.5495	9.6952	9.2693 <i>n</i>
167	4510	5.6*	A	23 51.70	2.223	-0.008	60 35 30.0	18.72	+0.006	1.2724 <i>n</i>	9.5536	9.7200	9.9103 <i>n</i>
168	4509	7.2	C	23 58	2.900	-	19 42 16.6	18.72	+0.09	1.2723 <i>n</i>	9.5542	9.7237	9.4980 <i>n</i>
169	XIII, 113	8.5	C	24 15	2.2	-	60 34 26.7	18.71	-	1.2721 <i>n</i>	9.5556	9.7211	9.9100 <i>n</i>
170	4513	7.8	A	13 24 56.53	+2.846	-	24 52 56.8	-18.69	-	1.2716 <i>n</i>	9.5590	9.7372	9.5935 <i>n</i>
171	4519	6*	A	13 25 50.42	+2.619	-	42 44 59.8	-18.66	-	1.2710 <i>n</i>	9.5633	9.7536	9.8005 <i>n</i>
172	XIII, 120	7.6	C	26 30	2.9	-	15 02 13.2	18.64	-	1.2705 <i>n</i>	9.5665	9.7115	9.3823 <i>n</i>
173	4526	6.7*	B	26 52.81	2.841	-	24 59 47.7	18.63	-0.18	1.2702 <i>n</i>	9.5683	9.7401	9.5939 <i>n</i>
174	XIII, 131	6.7*	C	28 53	3.0	-	13 09 17.5	18.56	-	1.2686 <i>n</i>	9.5777	9.7064	9.3236 <i>n</i>
175	4536	6*	A	13 29 12.77	+2.677	+0.005	37 49 23.9	-18.55	-0.008	1.2684 <i>n</i>	9.5792	9.7600	9.7538 <i>n</i>
176	XIII, 134	6.5	B	13 29 17	+2.854	-	23 08 09.3	-18.55	+0.11	1.2683 <i>n</i>	9.5796	9.7389	9.5605 <i>n</i>
177	4540	6*	B	29 18.90	2.318	+0.001	55 59 22.2	18.55	-0.02	1.2683 <i>n</i>	9.5797	9.7461	9.8847 <i>n</i>
178	4538	5*	B	29 20.63	2.473	-0.012	49 39 19.7	18.55	+0.005	1.2683 <i>n</i>	9.5798	9.7563	9.8482 <i>n</i>
179	4545	6*	B	29 54.83	2.563	-	44 50 12.6	18.53	+0.05	1.2678 <i>n</i>	9.5824	9.7614	9.8139 <i>n</i>
180	4550	7.2	A	13 31 37.85	+2.377	-0.002	53 19 36.3	-18.47	-0.05	1.2665 <i>n</i>	9.5902	9.7569	9.8685 <i>n</i>
181	4552	5*	A	13 31 54.50	+2.679	-	36 55 52.7	-18.46	0.00	1.2663 <i>n</i>	9.5915	9.7645	9.7429 <i>n</i>
182	4553	6.5	B	32 06.49	2.847	-	23 10 03.4	18.46	-0.06	1.2661 <i>n</i>	9.5924	9.7426	9.5588 <i>n</i>
183	4555	7.0	B	32 18.01	2.369	-	53 13 50.5	18.45	-0.02	1.2660 <i>n</i>	9.5932	9.7587	9.8675 <i>n</i>
184	4556	6.5	C	32 42.44	2.413	-	51 21 05.8	18.43	-	1.2656 <i>n</i>	9.5950	9.7622	9.8560 <i>n</i>
185	XIII, 155	6.5	C	13 33 01	+2.9	-	18 54 07.0	-18.42	-	1.2654 <i>n</i>	9.5964	9.7311	9.4737 <i>n</i>
186	4559	5*	B	13 33 24.91	+2.964	0.000	11 22 55.2	-18.41	-	1.2650 <i>n</i>	9.5981	9.7021	9.2581 <i>n</i>
187	4564	6.5*	B	34 40.09	2.345	-0.013	53 33 13.2	18.37	+0.05	1.2640 <i>n</i>	9.6036	9.7639	9.8673 <i>n</i>
188	4562	6.5*	A	34 42.20	2.869	-0.003	20 35 19.6	18.37	0.017	1.2640 <i>n</i>	9.6038	9.7383	9.5079 <i>n</i>
189	4563	7.5	C	34 42.69	2.869	-	20 38 48.6	18.37	+0.05	1.2640 <i>n</i>	9.6038	9.7385	9.5091 <i>n</i>
190	XIII, 163	6*	C	13 34 53	+2.8	-	28 41 54.0	-18.36	-	1.2638 <i>n</i>	9.6045	9.7587	9.6431 <i>n</i>
191	4566	6.5*	A	13 35 07.53	+2.841	-	23 07 47.4	-18.35	-0.034	1.2636 <i>n</i>	9.6056	9.7462	9.5556 <i>n</i>
192	Gr. 2030	6.7*	C	35 47	2.2	-	57 50 23.4	18.33	-	1.2631 <i>n</i>	9.6084	9.7593	9.8886 <i>n</i>
193	4568	5.6*	A	35 59.70	2.255	-	55 18 52.8	18.32	-0.028	1.2628 <i>n</i>	9.6093	9.7644	9.8758 <i>n</i>
194	XIII, 167	7.6	C	36 28	2.9	-	15 46 45.8	18.30	-	1.2625 <i>n</i>	9.6113	9.7232	9.3948 <i>n</i>
195	Gr. 2032	6.7*	C	13 37 09	+2.6	-	42 18 16.9	-18.28	-	1.2619 <i>n</i>	9.6142	9.7765	9.7858 <i>n</i>

(132) 4407. A. R. from Ay. 70 (52.77, 6 obs.) Ay. 69 and Wb.

(176)=Pi. XIII, 134. The A. R. is uncertain.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. <i>a'</i> .	Log. <i>b'</i> .	Log. <i>c'</i> .	Log. <i>d'</i> .
				<i>h. m. s.</i>			<i>° ' "</i>						
196	4577	6*	B	13 37 36.21	+1.862	- . . .	65 27 15.8	-18.26	- . . .	1.2615 <i>n</i>	9.6161	9.7451	9.9182 <i>n</i>
197	4575	6.3	A	37 50.76	2.832	- . . .	24 19 53.4	18.25	-0.02	1.2613 <i>n</i>	9.6171	9.7500	9.5569 <i>n</i>
198	189	6*	C	39 04	2.3	- . . .	52 41 36.6	18.21	0.02	1.2603 <i>n</i>	9.6221	9.7754	9.8587 <i>n</i>
199	200	6.7*	B	40 35.83	2.212	+0.012	56 31 08.6	18.15	0.358	1.2589 <i>n</i>	9.6284	9.7737	9.8779 <i>n</i>
200	4592	6.7*	C	13 40 36	+2.723	- . . .	31 31 36.7	-18.15	-0.08	1.259 <i>n</i>	9.6284	9.7724	9.6752 <i>n</i>
201	4595	6.0	C	13 40 54.28	+2.698	- . . .	39 07 49.2	-18.14	- . . .	1.2586 <i>n</i>	9.6296	9.7821	9.7566 <i>n</i>
202	4594	6*	A	40 54.99	2.789	-0.002	26 19 48.3	18.14	-0.064	1.2586 <i>n</i>	9.6296	9.7619	9.6034 <i>n</i>
203	4596	6.5*	B	40 55.24	2.563	- . . .	41 42 58.7	18.14	0.05	1.2586 <i>n</i>	9.6297	9.7836	9.7797 <i>n</i>
204	4597	5.4*	AA	41 19.36	2.885	-0.031	18 04 50.5	18.12	+0.040	1.2583 <i>n</i>	9.6313	9.7366	9.4480 <i>n</i>
205	4600	5.6*	C	13 41 36.53	+2.604	- . . .	39 10 07.9	-18.11	- . . .	1.2580 <i>n</i>	9.6324	9.7834	9.7563 <i>n</i>
206	4605	6*	B	13 41 55.68	+2.248	+0.005	55 03 27.6	-18.10	-0.026	1.2577 <i>n</i>	9.6337	9.7790	9.8692 <i>n</i>
207	4607	2*	AA	42 36.81	2.383	-0.010	49 56 16.1	18.08	0.014	1.2571 <i>n</i>	9.6364	9.7858	9.8388 <i>n</i>
208	4609	6.7*	B	42 48.39	2.537	- . . .	42 40 23.5	18.07	-0.03	1.2569 <i>n</i>	9.6372	9.7874	9.7859 <i>n</i>
209	4610	6*	A	43 00.25	2.711	- . . .	31 48 42.8	18.06	- . . .	1.2567 <i>n</i>	9.6379	9.7764	9.6765 <i>n</i>
210	4615	4.5*	B	13 43 26.87	+2.899	-0.006	16 25 07.5	-18.04	+0.042	1.2563 <i>n</i>	9.6397	9.7320	9.4054 <i>n</i>
211	XIII, 211	7.0	C	13 43 31	+2.9	- . . .	13 37 54.4	-18.04	- . . .	1.2563 <i>n</i>	9.6400	9.7198	9.3264 <i>n</i>
212	XIII, 214	7.1	C	43 47	2.9	- . . .	13 48 47.2	18.03	- . . .	1.2560 <i>n</i>	9.6410	9.7209	9.3320 <i>n</i>
213	4618	5*	A	43 48.21	2.836	+0.005	21 53 07.4	18.03	+0.02	1.2560 <i>n</i>	9.6411	9.7526	9.5253 <i>n</i>
214	4621	7.2	B	44 08.33	2.866	0.000	19 15 04.8	18.02	0.00	1.2557 <i>n</i>	9.6424	9.7438	9.4717 <i>n</i>
215	XIII, 220	7.4	C	13 44 30	+2.8	- . . .	21 53 48.6	-18.00	- . . .	1.2554 <i>n</i>	9.6438	9.7534	9.5248 <i>n</i>
216	4627	5.6*	B	13 45 33.36	+2.649	- . . .	35 23 33.7	-17.96	- . . .	1.2544 <i>n</i>	9.6478	9.7861	9.7149 <i>n</i>
217	4628	6.5*	B	45 38.20	2.650	- . . .	35 17 10.1	17.96	- . . .	1.2543 <i>n</i>	9.6481	9.7861	9.7138 <i>n</i>
218	Gr. 2055	6*	C	45 41	1.9	- . . .	62 06 48.4	17.96	-0.08	1.2543 <i>n</i>	9.6483	9.7754	9.8985 <i>n</i>
219	Gr. 2056	6.7*	B	46 09.88	2.070	- . . .	59 09 31.4	17.94	- . . .	1.2538 <i>n</i>	9.6502	9.7825	9.8854 <i>n</i>
220	XIII, 225	6*	B	13 46 10.88	+2.936	- . . .	12 47 02.1	-17.94	- . . .	1.2538 <i>n</i>	9.6502	9.7177	9.2966 <i>n</i>
221	4632	5.7	B	13 46 16.53	+2.651	- . . .	35 03 51.3	-17.93	- . . .	1.2537 <i>n</i>	9.6506	9.7868	9.7108 <i>n</i>
222	4634	7.2	A	46 32.18	2.884	0.000	17 20 52.4	17.92	0.00	1.2534 <i>n</i>	9.6516	9.7866	9.4258 <i>n</i>
223	4637	6.5	A	47 14.59	2.869	0.000	18 32 59.3	17.90	+0.012	1.2528 <i>n</i>	9.6542	9.7442	9.4532 <i>n</i>
224	4640	6.0	A	47 30.16	2.732	-0.005	29 15 50.2	17.89	0.00	1.2525 <i>n</i>	9.6552	9.7778	9.6395 <i>n</i>
225	4646	5*	A	13 47 46.96	+1.752	+0.006	65 20 28.2	-17.88	-0.015	1.2522 <i>n</i>	9.6562	9.7729	9.9086 <i>n</i>
226	Gr. 2057	6.7	C	13 47 51	+2.5	- . . .	40 57 17.7	-17.87	- . . .	1.2522 <i>n</i>	9.6565	9.7958	9.7666 <i>n</i>
227	Gr. 2058	6.7	C	48 08	2.5	- . . .	42 48 02.7	17.87	- . . .	1.2520 <i>n</i>	9.6576	9.7974	9.7820 <i>n</i>
228	4648	3*	AA	48 43.97	2.860	-0.004	19 01 30.5	17.84	-0.354	1.2513 <i>n</i>	9.6598	9.7475	9.4624 <i>n</i>
229	4649	6*	B	49 15.04	2.216	+0.013	54 20 37.4	17.82	-0.028	1.2508 <i>n</i>	9.6617	9.7964	9.8585 <i>n</i>
230	XIII, 247	6.7*	C	13 49 49	+2.9	- . . .	14 40 10.7	-17.79	- . . .	1.2503 <i>n</i>	9.6637	9.7296	9.3517 <i>n</i>
231	4652	6*	B	13 50 37.77	+2.675	- . . .	32 38 34.8	-17.76	- . . .	1.2495 <i>n</i>	9.6663	9.7892	9.6792 <i>n</i>
232	4656	5*	A	50 51.72	2.739	+0.005	28 06 21.2	17.75	-0.055	1.2492 <i>n</i>	9.6675	9.7795	9.6202 <i>n</i>
233	XIII, 255	6.8	C	51 13	2.8	- . . .	21 33 58.4	17.74	- . . .	1.2489 <i>n</i>	9.6688	9.7597	9.5121 <i>n</i>
234	4662	6.7*	A	52 37.82	2.899	- . . .	15 15 38.4	17.68	-0.05	1.2475 <i>n</i>	9.6738	9.7346	9.3656 <i>n</i>
235	4664	6*	A	13 52 47.53	+2.812	+0.003	22 18 24.9	-17.67	-0.06	1.2473 <i>n</i>	9.6744	9.7639	9.5244 <i>n</i>
236	XIII, 273	7.5	C	13 52 59	+1.7	- . . .	65 58 16.7	-17.66	-0.28	1.2471 <i>n</i>	9.6751	9.7842	9.9056 <i>n</i>
237	XIII, 279	7.3	C	55 16	2.9	- . . .	14 20 12.2	17.57	- . . .	1.2448 <i>n</i>	9.6831	9.7322	9.3364 <i>n</i>
238	4675	6*	A	55 30.39	2.728	-0.005	27 59 28.2	17.56	+0.012	1.2445 <i>n</i>	9.6839	9.7852	9.6138 <i>n</i>
239	XIII, 280	7.0	C	55 40	2.9	- . . .	17 21 41.9	17.55	- . . .	1.2443 <i>n</i>	9.6844	9.7470	9.4170 <i>n</i>
240	XIII, 281	6.7*	C	13 55 40	+2.9	- . . .	18 16 37.8	-17.55	- . . .	1.2443 <i>n</i>	9.6844	9.7510	9.4386 <i>n</i>
241	XIII, 285	7.7	C	13 55 41	+1.7	- . . .	64 59 27.3	-17.55	- . . .	1.2443 <i>n</i>	9.6845	9.7936	9.8994 <i>n</i>
242	4676	7.0	A	55 49.66	2.664	- . . .	32 10 11.6	17.55	- . . .	1.2442 <i>n</i>	9.6850	9.7959	9.6683 <i>n</i>
243	4678	7.5	A	57 00.45	2.659	- . . .	32 15 49.0	17.50	- . . .	1.2429 <i>n</i>	9.6890	9.7978	9.6611 <i>n</i>
244	XIII, 289	6.0	C	57 14	2.4	- . . .	46 21 36.0	17.49	- . . .	1.2427 <i>n</i>	9.6898	9.8154	9.8001 <i>n</i>
245	4684	6.7*	C	13 58 20.64	+2.239	- . . .	51 34 25.0	-17.44	- . . .	1.2415 <i>n</i>	9.6935	9.8172	9.8333 <i>n</i>
246	4689	6.7*	A	13 59 05.63	+1.316	- . . .	69 16 50.8	-17.41	- . . .	1.2407 <i>n</i>	9.6960	9.7910	9.9095 <i>n</i>
247	XIII, 303	6.9	B	14 0 32.08	2.859	- . . .	17 34 01.2	17.34	- . . .	1.2391 <i>n</i>	9.7007	9.7522	9.4167 <i>n</i>
248	4694	7.2	A	0 53.57	2.660	- . . .	31 26 54.2	17.33	-0.11	1.2387 <i>n</i>	9.7019	9.8013	9.6540 <i>n</i>
249	4696	3.4*	AA	1 00.36	1.629	-0.005	64 58 25.5	17.32	+0.008	1.2386 <i>n</i>	9.7023	9.8062	9.8936 <i>n</i>
250	XIII, 309	7.0	C	14 1 20	+2.7	- . . .	29 02 04.6	-17.31	- . . .	1.2382 <i>n</i>	9.7033	9.7955	9.6221 <i>n</i>
251	Gr. 2077	7.0	C	14 2 16	+2.4	- . . .	42 41 40.5	-17.27	- . . .	1.2372 <i>n</i>	9.7063	9.8220	9.7663 <i>n</i>
252	4699	6.5*	A	2 55.85	2.401	- . . .	44 26 59.3	17.24	-0.03	1.2364 <i>n</i>	9.7084	9.8245	9.7796 <i>n</i>
253	XIV, 1	7.0	C	3 37	2.9	- . . .	16 12 58.5	17.21	0.05	1.2357 <i>n</i>	9.7106	9.7482	9.3795 <i>n</i>
254	4701	6*	A	3 37.04	2.357	-0.004	50 02 58.0	17.21	0.01	1.2357 <i>n</i>	9.7106	9.8276	9.8180 <i>n</i>
255	4706	5*	A	14 4 41.89	+2.738	+0.001	25 41 04.8	-17.16	-0.055	1.2344 <i>n</i>	9.7140	9.7891	9.5692 <i>n</i>
256	Gr. 2082	6.0	C	14 4 54	+1.9	- . . .	59 55 49.6	-17.15	- . . .	1.2342 <i>n</i>	9.7147	9.8235	9.8692 <i>n</i>
257	4714	6.5	A	5 48.05	2.621	- . . .	32 53 03.4	17.11	+0.04	1.2330 <i>n</i>	9.7179	9.8115	9.6656 <i>n</i>
258	Gr. 2083	6.6	C	6 36	2.4	- . . .	42 55 43.5	17.07	- . . .	1.2322 <i>n</i>	9.7199	9.8293	9.7627 <i>n</i>
259	Gr. 2084	6.5	B	7 04.24	+1.892	- . . .	59 08 22.8	-17.05	+0.04	1.2317 <i>n</i>	9.7214	9.8390	9.8532 <i>n</i>
260	XIV, 20	6.7*	C	14 7 45	2.9	- . . .	12 35 05.0	17.02	- . . .	1.2309 <i>n</i>	9.7235	9.7314	9.2669 <i>n</i>

(221) = B. A. C. 4632. 2 observations by Prof. Yarnall in 1873 give declination 50".4.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				<i>h. m. s.</i>			<i>° ' "</i>						
261	4721	6.5*	A	14 8 04.55	+2.901	—0.015	13 32 47.6	—17.00	—0.061	1.2305 <i>n</i>	9.7244	9.7372	9.2980 <i>n</i>
262	4723	7.0	B	8 21.13	2.666	.	29 41 26.1	16.99	.	1.2302 <i>n</i>	9.7253	9.8062	9.6229 <i>n</i>
263	4724	6.5*	B	8 43.67	2.935	+0.002	10 41 25.1	16.97	—0.158	1.2297 <i>n</i>	9.7264	9.7203	9.1959 <i>n</i>
264	26	6.7*	C	8 53	2.8	.	22 27 27.8	16.95	.	1.2295 <i>n</i>	9.7269	9.7815	9.5094 <i>n</i>
265	4725	7.2	B	14 8 59.17	+2.146	+0.014	52 22 22.7	—16.96	—0.043	1.2294 <i>n</i>	9.7272	9.8373	9.8260 <i>n</i>
266	4726	4.5*	B	14 9 00.33	+2.146	+0.014	52 22 29.4	—16.96	—0.013	1.2294 <i>n</i>	9.7272	9.8373	9.8260 <i>n</i>
267	4728	6*	B	9 21.10	2.425	.	42 06 22.5	16.94	0.13	1.2290 <i>n</i>	9.7283	9.8329	9.7532 <i>n</i>
268	4729	1*	AA	9 57.61	2.812	—0.078	19 50 03.1	16.91	1.97	1.2282 <i>n</i>	9.7301	9.7712	9.4567 <i>n</i>
269	4731	6.7	B	10 11.58	2.816	+0.004	19 29 40.9	16.90	0.041	1.2280 <i>n</i>	9.7308	9.7698	9.4492 <i>n</i>
270	4736	7.0	C	14 10 54.00	+2.108	.	53 07 03.4	—16.87	.	1.2271 <i>n</i>	9.7329	9.8406	9.8280 <i>n</i>
271	4738	6*	B	14 11 19.40	+2.456	.	40 19 30.1	—16.85	.	1.2266 <i>n</i>	9.7341	9.8336	9.7354 <i>n</i>
272	4737	6.7*	C	11 29.78	2.865	.	15 50 33.5	16.84	.	1.2264 <i>n</i>	9.7347	9.7525	9.3601 <i>n</i>
273	4741	4*	A	11 37.87	2.301	—0.016	46 39 47.1	16.83	+0.155	1.2262 <i>n</i>	9.7350	9.8407	9.7858 <i>n</i>
274	4742	4.5*	A	11 44.28	2.143	—0.015	51 56 40.1	16.83	+0.078	1.2261 <i>n</i>	9.7353	9.8423	9.8201 <i>n</i>
275	4747	5*	A	14 12 42.68	+2.538	.	36 05 13.2	—16.78	.	1.2249 <i>n</i>	9.7382	9.8280	9.6928 <i>n</i>
276	4752	6.8	A	14 12 54.38	+2.137	—0.001	51 53 09.4	—16.77	.	1.2246 <i>n</i>	9.7387	9.8444	9.8183 <i>n</i>
277	4751	6.5*	B	13 13.33	2.894	+0.011	13 34 55.0	16.76	—0.019	1.2242 <i>n</i>	9.7396	9.7409	9.2922 <i>n</i>
278	4753	5*	A	13 50.29	2.847	—0.009	16 52 50.1	16.73	+0.079	1.2235 <i>n</i>	9.7414	9.7599	9.3843 <i>n</i>
279	4756	7.3	A	14 08.39	2.105	.	52 36 35.6	16.71	.	1.2231 <i>n</i>	9.7423	9.8466	9.8210 <i>n</i>
280	4758	6*	B	14 14 39.72	+2.463	.	39 22 09.9	—16.69	.	1.2224 <i>n</i>	9.7438	9.8370	9.7226 <i>n</i>
281	Gr. 2102	6.5	C	14 14 47	+2.0	.	55 26 22.0	—16.68	.	1.2223 <i>n</i>	9.7441	9.8470	9.8358 <i>n</i>
282	Gr. 2105	6.7*	B	17 27.69	1.170	.	68 21 17.1	16.55	.	1.2188 <i>n</i>	9.7516	9.8355	9.8849 <i>n</i>
283	4778	7.8	C	18 18.18	2.483	.	37 46 21.3	16.51	+0.05	1.2178 <i>n</i>	9.7540	9.8392	9.7027 <i>n</i>
284	Gr. 2108	7.4	C	18 43	1.1	.	68 22 22.0	16.49	.	1.2172 <i>n</i>	9.7551	9.8381	9.8834 <i>n</i>
285	Gr. 2107	6.8	C	14 19 04	+1.7	.	61 32 13.4	—16.47	—0.10	1.2168 <i>n</i>	9.7559	9.8500	9.8587 <i>n</i>
286	4783	6.7*	A	14 20 23.11	+2.450	.	38 57 31.5	—16.41	.	1.2150 <i>n</i>	9.7596	9.8444	9.7113 <i>n</i>
287	4785	6.5*	A	20 38.57	2.794	—0.002	19 47 24.1	16.39	+0.045	1.2147 <i>n</i>	9.7603	9.7805	9.4422 <i>n</i>
288	4789	4*	AA	20 56.49	2.069	—0.025	52 25 45.1	16.38	—0.407	1.2143 <i>n</i>	9.7611	9.8583	9.8112 <i>n</i>
289	4797	6.5	A	23 05.90	2.487	.	36 45 25.5	16.27	.	1.2114 <i>n</i>	9.7669	9.8435	9.6862 <i>n</i>
290	XIV, 97	6.7*	C	14 23 10	+2.7	.	26 24 50.2	—16.27	.	1.2113 <i>n</i>	9.7670	9.8121	9.5572 <i>n</i>
291	4804	6*	B	14 24 16.87	+2.120	—0.031	50 24 17.5	—16.21	—0.073	1.2097 <i>n</i>	9.7699	9.8635	9.7944 <i>n</i>
292	4803	6.7*	B	24 28.40	2.572	.	32 20 53.6	16.20	.	1.2095 <i>n</i>	9.7704	9.8338	9.6357 <i>n</i>
293	4805	6.7*	A	24 41.22	2.352	+0.014	42 21 39.4	16.19	—0.21	1.2092 <i>n</i>	9.7710	9.8563	9.7355 <i>n</i>
294	4808	4.3*	AA	26 26.56	2.594	—0.006	30 55 15.9	16.10	+0.122	1.2067 <i>n</i>	9.7755	9.8317	9.6154 <i>n</i>
295	4809	6*	B	14 26 48.28	+2.666	.	27 13 51.6	—16.08	—0.08	1.2062 <i>n</i>	9.7764	9.8491	9.5645 <i>n</i>
296	4810	6.5*	A	14 26 51.67	+2.735	—0.008	22 48 41.0	—16.07	+0.035	1.2061 <i>n</i>	9.7766	9.8005	9.4925 <i>n</i>
297	4812	3.4*	A	27 02.69	2.427	0.004	38 51 21.0	16.06	+0.141	1.2059 <i>n</i>	9.7770	9.8533	9.7012 <i>n</i>
298	4817	6*	A	27 48.13	1.442	—0.026	63 44 19.3	16.02	—0.025	1.2048 <i>n</i>	9.7790	9.8640	9.8553 <i>n</i>
299	4816	6.8	B	28 13.85	2.453	.	37 30 45.5	16.00	.	1.2042 <i>n</i>	9.7800	9.8519	9.6866 <i>n</i>
300	XIV, 126	6*	A	14 28 19.16	+1.630	—0.008	60 46 36.8	—16.00	0.00	1.2040 <i>n</i>	9.7803	9.8681	9.8428 <i>n</i>
301	Gr. 2129	7.2	C	14 28 47	+1.0	.	63 38 01.0	—15.97	—0.05	1.2034 <i>n</i>	9.7814	9.8580	9.8703 <i>n</i>
302	4820	6.7*	B	28 52.40	2.544	.	33 05 01.2	15.97	.	1.2032 <i>n</i>	9.7816	9.8412	9.6382 <i>n</i>
303	XIV, 119	7.0	C	29 02	2.9	.	13 38 45.8	15.96	.	1.2030 <i>n</i>	9.7821	9.7516	9.2736 <i>n</i>
304	4823	5*	B	29 14.27	2.598	+0.017	30 17 21.5	15.95	.	1.2027 <i>n</i>	9.7826	9.8327	9.6033 <i>n</i>
305	4826	7.3	B	14 29 24.37	+1.977	—0.021	53 26 58.5	—15.94	+0.25	1.2025 <i>n</i>	9.7830	9.8726	9.8052 <i>n</i>
306	4827	6.7*	C	14 29 31.84	2.191	.	47 20 05.5	15.93	.	1.2023 <i>n</i>	9.7833	9.8695	9.7666 <i>n</i>
307	4825	6.7*	A	29 31.91	+2.456	.	37 10 34.2	—15.93	.	1.2023 <i>n</i>	9.7833	9.8528	9.6814 <i>n</i>
308	4830	6*	B	30 17.62	2.103	.	49 54 49.4	15.89	0.00	1.2012 <i>n</i>	9.7852	9.8727	9.7827 <i>n</i>
309	4834	6.7	A	30 58.15	1.238	+0.010	65 56 30.3	15.86	+0.04	1.2002 <i>n</i>	9.7868	9.8698	9.8586 <i>n</i>
310	XIV, 140	6.1	B	14 32 25.33	+2.790	.	18 50 34.3	—15.78	—0.09	1.1981 <i>n</i>	9.7904	9.7853	9.4051 <i>n</i>
311	4841	6*	B	14 33 31.00	+2.264	.	44 10 56.0	—15.72	+0.04	1.1964 <i>n</i>	9.7930	9.8714	9.7375 <i>n</i>
312	4843	5.6*	A	34 11.07	2.240	—0.007	44 56 41.7	15.68	—0.018	1.1954 <i>n</i>	9.7946	9.8735	9.7423 <i>n</i>
313	4845	6*	B	34 17.27	1.900	.	54 33 51.9	15.68	.	1.1953 <i>n</i>	9.7948	9.8805	9.8042 <i>n</i>
314	4846	6.5	B	34 43.75	2.862	0.00	14 04 21.9	15.65	0.00	1.1946 <i>n</i>	9.7959	9.7580	9.2783 <i>n</i>
315	4847	4*	A	14 34 51.05	+2.816	+0.002	16 57 18.9	—15.65	—0.004	1.1944 <i>n</i>	9.7962	9.7763	9.3571 <i>n</i>
316	4849	3.4*	A	14 35 10.79	+2.858	+0.005	14 15 56.2	—15.63	—0.012	1.1939 <i>n</i>	9.7969	9.7596	9.2834 <i>n</i>
317	4853	6.5*	C	35 43.20	2.889	—0.012	12 12 02.0	15.60	—0.11	1.1931 <i>n</i>	9.7982	9.7458	9.2159 <i>n</i>
318	160	6.7*	C	36 12	2.7	.	21 39 38.8	15.57	.	1.1924 <i>n</i>	9.7993	9.8033	9.4574 <i>n</i>
319	4863	6.8	A	37 36.03	2.425	.	37 17 24.2	15.50	.	1.1902 <i>n</i>	9.8026	9.8632	9.6704 <i>n</i>
320	4864	5*	A	14 37 55.71	+2.637	.	27 03 37.6	—15.48	—0.009	1.1897 <i>n</i>	9.8034	9.8297	9.5455 <i>n</i>
321	4870	6.5*	C	14 38 53.48	+2.329	.	40 59 21.6	—15.42	.	1.1882 <i>n</i>	9.8056	9.8732	9.7028 <i>n</i>
322	4874	6*	A	38 56.35	1.478	+0.003	61 47 43.2	15.42	—0.03	1.1881 <i>n</i>	9.8057	9.8456	9.8310 <i>n</i>
323	4873	5.4*	B	39 24.58	2.801	—0.002	17 29 41.3	15.39	0.049	1.1874 <i>n</i>	9.8067	9.7828	9.3632 <i>n</i>
324	4876	2.3*	AA	39 31.67	2.623	—0.003	27 36 07.9	15.39	—0.002	1.1872 <i>n</i>	9.8070	9.8335	9.5509 <i>n</i>
325	4881	6.8	C	14 39 53.41	+2.190	.	45 42 55.4	—15.37	.	1.1866 <i>n</i>	9.8078	9.8824	9.7393 <i>n</i>

(279) A. R. quite uncertain.

(295) — B. A. C. 4809. The star's declination is rather uncertain.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. <i>a'</i> .	Log. <i>b'</i> .	Log. <i>c'</i> .	Log. <i>d'</i> .
				<i>h. m. s.</i>			<i>° ' "</i>						
326	XIV, 178	6*	C	14 40 13	+2.8	- - -	15 33 30.8	-15.35	+0.05	1.1861 _n	9.8086	9.7719	9.3151 _n
327	4885	7.0	B	40 46.92	2.269	- - -	42 54 26.8	15.32	+0.06	1.1852 _n	9.8098	9.8792	9.7160 _n
328	1884	6*	C	42 51	2.7	- - -	24 53 12.1	15.29	- - -	1.1818 _n	9.8144	9.8248	9.5038 _n
329	4897	6*	A	44 12.29	2.377	-0.021	38 19 38.1	15.12	+0.122	1.1796 _n	9.8174	9.8737	9.6699 _n
330	4902	6*	C	14 44 35.44	+2.581	- - -	29 05 04.7	-15.10	- - -	1.1790 _n	9.8182	9.8147	9.5642 _n
331	4903	6.5*	B	14 44 51.31	+2.138	+0.001	46 38 16.1	-15.08	-0.105	1.1785 _n	9.8188	9.8904	9.7379 _n
332	4907	6*	B	45 26.34	2.046	-0.007	49 14 07.9	15.05	+0.068	1.1776 _n	9.8201	9.8942	9.7547 _n
333	Gr. 2157	6.3	C	45 29	1.9	- - -	51 53 34.2	15.05	- - -	1.1775 _n	9.8202	9.8966	9.7312 _n
334	4906	6*	A	45 33.56	2.386	-0.020	37 47 09.0	15.04	+0.093	1.1774 _n	9.8203	9.8739	9.6624 _n
335	4905	5.4*	A	14 45 37.47	+2.756	+0.011	19 37 13.8	-15.04	-0.114	1.1772 _n	9.8205	9.7999	9.4012 _n
336	D.M.16 ² , 2705	6.2	C	14 47 32	+2.8	- - -	16 12 59.5	-14.93	- - -	1.1740 _n	9.8245	9.7804	9.3179 _n
337	4917	6.5	C	47 39	2.1	- - -	46 59 30.4	14.92	-0.05	1.1738 _n	9.8248	9.8946	9.7357 _n
338	4918	6.5*	A	48 16.06	1.532	-0.016	59 48 09.7	14.89	+0.168	1.1728 _n	9.8261	9.9016	9.8073 _n
339	4926	6*	A	50 19.29	2.830	0.000	14 57 10.2	14.76	+0.019	1.1692 _n	9.8391	9.7736	9.2787 _n
340	4934	6.8	B	14 51 16.99	2.203	- - -	41 38 26.9	14.71	- - -	1.1676 _n	9.8323	9.8898	9.6879 _n
341	4933	6.5*	A	14 51 21.96	+2.795	0.000	16 53 33.3	-14.70	0.00	1.1674 _n	9.8325	9.7873	9.3285 _n
342	4937	6*	A	52 13.95	1.978	+0.004	50 08 25.3	14.65	-0.232	1.1659 _n	9.8342	9.9043	9.7489 _n
343	XIV, 231	7.0	C	52 22	2.8	- - -	14 32 21.5	14.64	- - -	1.1656 _n	9.8345	9.7720	9.2632 _n
344	4912	6.5	A	54 38.36	2.293	- - -	40 08 31.4	14.51	- - -	1.1616 _n	9.8391	9.8903	9.6688 _n
345	4943	5.6*	B	14 54 49.36	+2.303	-0.004	39 45 43.4	-14.50	+0.04	1.1612 _n	9.8394	9.8896	9.6650 _n
346	XIV, 247	6.7*	B	14 55 16.18	+2.687	- - -	22 32 30.5	-14.47	- - -	1.1604 _n	9.8403	9.8236	9.4419 _n
347	4949	5*	A	55 36.16	0.946	-0.006	66 25 50.7	14.45	+0.058	1.1598 _n	9.8410	9.9080	9.8198 _n
348	4952	6*	C	56 22.83	2.046	- - -	47 46 19.1	14.49	- - -	1.154 _n	9.8425	9.9068	9.7257 _n
349	4953	5.4*	B	56 37.99	2.627	+0.002	25 30 11.7	14.39	-0.057	1.1579 _n	9.8430	9.8398	9.498 _n
350	4958	3*	A	14 57 14.24	+2.262	-0.002	40 53 04.7	-14.35	-0.036	1.1568 _n	9.8442	9.8950	9.6706 _n
351	4961	6	C	14 58 06.79	+2.398	- - -	35 41 46.6	-14.30	- - -	1.1552 _n	9.8459	9.8817	9.6191 _n
352	4962	7.2	A	58 26.54	2.581	-0.004	27 34 15.6	14.28	-0.04	1.1546 _n	9.8465	9.8510	9.5179 _n
353	4967	6*	B	58 31.52	1.398	-0.005	60 41 45.9	14.27	+0.02	1.1544 _n	9.8467	9.9165	9.7928 _n
354	4965	6*	B	58 41.89	2.127	- - -	45 08 02.8	14.26	- - -	1.1541 _n	9.8470	9.9055	9.7024 _n
355	4969	4.5*	AA	14 59 05.38	+2.582	-0.012	27 26 10.0	-14.24	-0.01	1.1534 _n	9.8478	9.8519	9.5147 _n
356	4974	5.4*	B	14 59 40.16	+2.017	-0.039	48 08 29.2	-14.20	+0.02	1.1523 _n	9.8488	9.9114	9.7221 _n
357	4980	5.6*	A	15 1 17.30	1.992	-0.008	48 38 04.9	14.10	+0.02	1.1492 _n	9.8519	9.9140	9.7224 _n
358	XIV, 281	6*	B	1 36.52	2.745	- - -	18 55 35.6	14.08	- - -	1.1486 _n	9.8525	9.8071	9.3574 _n
359	122 Heis Bo.	6*	C	1 41	2.4	- - -	36 56 15.2	14.07	- - -	1.1484 _n	9.8527	9.8892	9.6251 _n
360	4981	5*	A	15 1 48.57	+2.620	+0.010	25 21 25.2	-14.07	-0.184	1.1482 _n	9.8529	9.8434	9.4777 _n
361	4989	6*	A	15 2 03.97	+0.888	- - -	66 24 18.9	-14.05	-0.05	1.1477 _n	9.8534	9.9178	9.8076 _n
362	4992	5*	B	2 42.39	1.703	- - -	55 02 17.6	14.00	- - -	1.1461 _n	9.8545	9.9216	9.7575 _n
363	4991	6*	A	3 00.00	2.588	+0.001	26 46 52.1	13.99	-0.033	1.1459 _n	9.8551	9.8513	9.4975 _n
364	4993	6.7*	B	3 08.79	2.612	- - -	25 35 17.0	13.98	- - -	1.1456 _n	9.8554	9.8456	9.4788 _n
365	5000	7.2	B	15 5 34.98	+2.429	- - -	33 32 12.7	-13.83	- - -	1.1408 _n	9.8598	9.8818	9.5811 _n
366	5001	7.3	B	15 5 38.44	+2.519	- - -	29 42 15.9	-13.83	- - -	1.1407 _n	9.8599	9.8668	9.5336 _n
367	125 Heis Bo.	6*	B	6 23.03	2.728	- - -	19 26 51.3	13.78	- - -	1.1392 _n	9.8612	9.8136	9.3594 _n
368	5019	7.5	B	7 23.45	1.943	- - -	49 09 51.9	13.72	- - -	1.1372 _n	9.8640	9.9220	9.7139 _n
369	XV, 18	6*	C	8 00	2.6	- - -	23 26 55.6	13.68	+0.11	1.1359 _n	9.8641	9.8383	9.4333 _n
370	Gr. 2202	6.3	C	8 41	+1.9	- - -	49 02 53.0	-13.63	+0.06	1.1346 _n	9.8653	9.9235	9.7105 _n
371	5026	6.7*	B	15 8 49.99	+2.284	- - -	38 44 02.7	-13.62	- - -	1.1342 _n	9.8656	9.9018	9.6284 _n
372	5031	5*	A	9 15.49	2.512	-0.007	29 37 45.8	13.59	+0.027	1.1334 _n	9.8663	9.8696	9.5253 _n
373	5033	6.1	B	9 39.21	2.165	- - -	42 38 15.3	13.57	- - -	1.1326 _n	9.8670	9.9127	9.6612 _n
374	5036	3*	AA	10 27.85	2.411	+0.019	33 46 56.4	13.52	-0.114	1.1309 _n	9.8684	9.8873	9.5738 _n
375	XV, 39	6.3	C	15 12 02	+1.8	- - -	51 24 06.5	-13.42	- - -	1.1275 _n	9.8711	9.9302	9.7184 _n
376	5048	6*	C	15 12 48.25	+2.688	- - -	21 01 52.3	-13.37	- - -	1.1260 _n	9.8724	9.8277	9.3788 _n
377	5058	5.6*	A	13 12.62	0.623	+0.037	67 49 18.2	13.34	-0.393	1.1251 _n	9.8731	9.9321	9.7896 _n
378	5061	6.5*	A	14 58.33	2.489	-0.099	30 04 14.6	13.22	-0.058	1.1213 _n	9.8761	9.8763	9.5191 _n
379	F. 2626	6.8	C	15 22	1.4	- - -	59 14 52.8	13.20	- - -	1.1205 _n	9.8767	9.9390	9.7525 _n
380	Gr. 2216	7.0	B	15 15 29.70	+2.182	-0.001	41 25 50.2	-13.19	+0.184	1.1202 _n	9.8769	9.9158	9.6387 _n
381	5064	7.0	B	15 15 33.76	+1.842	- - -	50 40 01.9	-13.18	- - -	1.1200 _n	9.8771	9.9334	9.7063 _n
382	XV, 53	6.0	C	15 43	2.6	- - -	25 24 37.5	13.17	- - -	1.1197 _n	9.8773	9.8546	9.4501 _n
383	F. 2628	6.8	C	15 49	1.4	- - -	58 57 22.9	13.17	- - -	1.1195 _n	9.8775	9.9395	9.7502 _n
384	5071	6*	B	16 24.71	1.759	- - -	52 24 34.6	13.13	- - -	1.1182 _n	9.8781	9.9363	9.7150 _n
385	5067	6.7*	A	15 16 28.15	+2.837	+0.001	13 00 58.9	-13.12	-0.014	1.1181 _n	9.8786	9.7731	9.1685 _n
386	5072	5.6*	A	15 16 48.30	+2.404	-0.001	33 22 56.0	-13.10	+0.002	1.1173 _n	9.8791	9.8914	9.5551 _n
387	5077	7.0	C	17 50.20	1.733	- - -	52 47 30.1	13.03	-0.06	1.1151 _n	9.8808	9.9383	9.7141 _n
388	5076	6*	C	17 59.92	2.217	- - -	40 01 44.0	13.02	- - -	1.1147 _n	9.8810	9.9145	9.6209 _n
389	5075	5*	A	18 02.42	2.463	+0.011	30 44 25.5	13.02	-0.196	1.1146 _n	9.8811	9.8818	9.5210 _n
390	5084	4*	A	15 19 46.11	+2.277	-0.011	37 48 59.8	-12.90	+0.079	1.1108 _n	9.8839	9.9096	9.5960 _n

(356) 4974. The position given refers to the point midway between the two stars. Difference of declination used, $3''.3 + 0''.04$ ($t=1875$.)

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. <i>a'</i> .	Log. <i>b'</i> .	Log. <i>c'</i> .	Log. <i>d'</i> .
				<i>h. m. s.</i>			<i>° ' "</i>						
391	Gr. 2227	7.0	C	15 19 48	+2.3		37 47 14.6	-12.90	+0.17	1.1107 <i>n</i>	9.8839	9.9098	9.5958 <i>n</i>
392	5085	5*	A	19 59.55	2.780	-0.002	15 52 08.6	12.89		1.1103 <i>n</i>	9.8842	9.7971	9.2450 <i>n</i>
393	XV, 72	6.8	C	20 16	2.7		19 55 17.4	12.87	+0.03	1.1093 <i>n</i>	9.8846	9.8255	9.3399 <i>n</i>
394	5091	6*	B	20 33.65	0.987		63 47 16.6	12.85	-0.14	1.1090 <i>n</i>	9.8851	9.9446	9.7592 <i>n</i>
395	5092	6.6	C	15 21 04.89	+1.949		47 30 08.2	-12.82		1.1078 <i>n</i>	9.8860	9.9346	9.6733 <i>n</i>
396	XV, 81	6*	C	15 21 24	+2.4		34 46 18.0	-12.80		1.1071 <i>n</i>	9.8865	9.9006	9.5610 <i>n</i>
397	Gr. 2232	6.8	B	21 42.40	2.050		44 54 26.1	12.78		1.1064 <i>n</i>	9.8869	9.9297	9.6516 <i>n</i>
398	Gr. 2234	7.2	B	21 50.96	1.212	-0.055	60 58 59.8	12.76	+0.18	1.1050 <i>n</i>	9.8872	9.9469	9.7456 <i>n</i>
399	R. C. 3387	7.3	C	22 08	2.1		44 36 35.9	12.75	-0.07	1.1054 <i>n</i>	9.8876	9.9296	9.6484 <i>n</i>
400	5097	3*	AA	15 22 09.11	+1.326	+0.003	59 24 16.4	-12.74	+0.011	1.1053 <i>n</i>	9.8876	9.9471	9.7381 <i>n</i>
401	XV, 83	6*	B	15 22 16.35	+2.578		25 32 16.4	-12.74	-0.02	1.1050 <i>n</i>	9.8878	9.8600	9.4375 <i>n</i>
402	5098	4*	A	22 40.54	2.485	-0.010	29 32 15.6	12.71	+0.068	1.1041 <i>n</i>	9.8881	9.8801	9.4948 <i>n</i>
403	XV, 89	6.7*	C	23 27	2.8		16 49 34.5	12.66	+0.08	1.1023 <i>n</i>	9.8897	9.8051	9.2618 <i>n</i>
404	Gr. 2237	6.7*	C	23 52	2.2		39 09 23.5	12.63		1.1013 <i>n</i>	9.8903	9.9175	9.5995 <i>n</i>
405	5115	6.7*	A	15 25 28.80	+1.180		61 06 07.3	-12.53	-0.02	1.0978 <i>n</i>	9.8926	9.9510	9.7379 <i>n</i>
406	5113	6.7	C	15 25 24.60	+1.906		48 08 35.5	-12.52		1.0977 <i>n</i>	9.8927	9.9101	9.6376 <i>n</i>
407	5116	6*	A	25 27.62	1.047	+0.005	62 42 30.1	12.52	-0.04	1.0976 <i>n</i>	9.8927	9.9509	9.7412 <i>n</i>
408	Gr. 2240	6.7*	C	25 43	1.5		55 37 25.1	12.50		1.0970 <i>n</i>	9.8931	9.9495	9.7115 <i>n</i>
409	Arg. 167	7.0	C	25 59	1.4		57 52 09.0	12.48		1.0964 <i>n</i>	9.8935	9.9511	9.7221 <i>n</i>
410	5120	6*	B	15 26 24.10	+2.761		16 28 53.1	-12.46	+0.011	1.0954 <i>n</i>	9.8942	9.8051	9.2461 <i>n</i>
411	5122	4.5	A	15 26 26.36	+2.152	+0.001	41 15 36.1	-12.45	-0.02	1.0953 <i>n</i>	9.8942	9.9259	9.6123 <i>n</i>
412	XV, 119	6.1	C	27 09	1.0		62 31 40.1	12.40		1.0936 <i>n</i>	9.8953	9.9529	9.7394 <i>n</i>
413	5130	4.8	B	27 18.44	2.147	-0.003	41 19 27.9	12.39	-0.02	1.0932 <i>n</i>	9.8955	9.9268	9.6108 <i>n</i>
414	5126	7.0	A	27 19.02	2.761	+0.003	16 26 10.1	12.39	0.00	1.0932 <i>n</i>	9.8955	9.8052	9.2427 <i>n</i>
415	5131	4*	B	15 27 53.28	+2.419	-0.004	31 46 56.7	-12.35	0.00	1.0918 <i>n</i>	9.8964	9.8942	9.5112 <i>n</i>
416	5132	6.7	C	15 28 11	+2.738		17 33 39.4	-12.33		1.0915 <i>n</i>	9.8966	9.8139	9.2689 <i>n</i>
417	5135	3.4*	B	28 49.91	2.867	-0.002	10 57 29.6	12.29	+0.023	1.0895 <i>n</i>	9.8978	9.7605	9.0463 <i>n</i>
418	5147	6*	B	29 11.00	0.841	-0.008	64 37 45.6	12.26	+0.05	1.0886 <i>n</i>	9.8983	9.9546	9.7424 <i>n</i>
419	5143	2*	AA	29 23.74	2.529	+0.010	27 08 11.7	12.25	-0.097	1.0881 <i>n</i>	9.8986	9.8735	9.4450 <i>n</i>
420	5146	6*	C	15 29 52.76	+2.725	-0.008	18 04 24.1	-12.22		1.0869 <i>n</i>	9.8993	9.8186	9.2761 <i>n</i>
421	5150	6*	C	15 30 29.15	+2.876		10 25 50.5	-12.17	-0.04	1.0851 <i>n</i>	9.9002	9.7563	9.0410 <i>n</i>
422	5155	5*	A	30 39.70	2.197	+0.002	39 25 34.4	12.16	-0.002	1.0850 <i>n</i>	9.9004	9.9244	9.5856 <i>n</i>
423	5152	6*	A	30 40.75	2.776	0.000	15 30 58.8	12.16	+0.011	1.0849 <i>n</i>	9.9001	9.7999	9.2102 <i>n</i>
424	5153	6*	C	30 43.68	2.755	+0.006	16 32 02.8	12.16		1.0848 <i>n</i>	9.9005	9.8077	9.2368 <i>n</i>
425	5157	6.7	A	15 30 52.94	+2.059		43 34 56.6	-12.15	+0.04	1.0844 <i>n</i>	9.9007	9.9359	9.6207 <i>n</i>
426	5164	7.0	C	15 31 29.72	+1.796		50 06 51.1	-12.10		1.0829 <i>n</i>	9.9016	9.9494	9.6657 <i>n</i>
427	R. C. 3416	6.8	C	31 37	2.2		40 12 54.0	12.09		1.0826 <i>n</i>	9.9018	9.9276	9.5904 <i>n</i>
428	XV, 142	6.7*	A	32 55	2.6		24 55 56.6	12.00	-0.05	1.0793 <i>n</i>	9.9037	9.8640	9.4020 <i>n</i>
429	5168	5*	C	33 20.29	2.147	+0.007	40 45 41.3	11.97	+0.082	1.0782 <i>n</i>	9.9042	9.9305	9.5909 <i>n</i>
430	5175	6.8	B	15 34 08.55	+2.032		44 00 45.1	-11.92		1.0762 <i>n</i>	9.9054	9.9390	9.6159 <i>n</i>
431	5177	6.5*	B	15 34 16.11	+1.909	+0.011	47 12 38.0	-11.91	-0.13	1.0759 <i>n</i>	9.9055	9.9170	9.6393 <i>n</i>
432	Gr. 2260	6*	C	34 20	1.5		54 55 08.3	11.90		1.0757 <i>n</i>	9.9056	9.9580	9.6865 <i>n</i>
433	5178	4*	A	34 40.25	2.258	+0.001	37 02 33.2	11.88	-0.047	1.0748 <i>n</i>	9.9061	9.9199	9.5526 <i>n</i>
434	5181	6.5*	B	34 55.16	1.748		50 49 54.5	11.86	-0.04	1.0742 <i>n</i>	9.9065	9.9538	9.6615 <i>n</i>
435	R. C. 3431	8.0	C	15 35 14	+2.1		43 06 06.5	-11.84		1.0734 <i>n</i>	9.9069	9.9386	9.6058 <i>n</i>
436	5180	6*	A	15 35 14.29	+2.753	+0.002	16 25 44.8	-11.84	0.00	1.0734 <i>n</i>	9.9069	9.8092	9.2227 <i>n</i>
437	5185	6.5*	B	35 54.46	2.816	0.00	13 14 59.5	11.79	-0.020	1.0716 <i>n</i>	9.9078	9.7837	9.1297 <i>n</i>
438	5187	5.4*	A	35 58.62	2.676	-0.005	20 04 27.8	11.79	-0.022	1.0714 <i>n</i>	9.9079	9.8358	9.3049 <i>n</i>
439	5189	6*	A	36 17.29	2.701	-0.009	18 51 49.2	11.77	+0.035	1.0706 <i>n</i>	9.9084	9.8276	9.2781 <i>n</i>
440	XV, 168	6.8	C	15 37 14	+0.6		66 11 50.7	-11.70	-0.11	1.0681 <i>n</i>	9.9097	9.9629	9.7274 <i>n</i>
441	5192	4*	A	15 37 29.64	+2.525	-0.005	26 41 33.9	-11.68	+0.026	1.0375 <i>n</i>	9.9100	9.8767	9.4177 <i>n</i>
442	5203	6*	A	39 01.44	2.723	0.002	17 39 51.5	11.57	+0.003	1.0334 <i>n</i>	9.9121	9.8203	9.2432 <i>n</i>
443	5204	6*	B	39 03.66	2.364	0.003	32 54 41.8	11.57	-0.013	1.0613 <i>n</i>	9.9121	9.9074	9.4962 <i>n</i>
444	5210	6.5*	A	39 26.71	1.633	-0.010	52 45 21.9	11.54	+0.02	1.0322 <i>n</i>	9.9126	9.9698	9.6610 <i>n</i>
445	5216	3.4*	A	15 40 25.15	+2.761	+0.007	15 48 52.1	-11.47	-0.033	1.0596 <i>n</i>	9.9139	9.8068	9.1923 <i>n</i>
446	5219	7.1	A	15 40 39.00	+2.759	+0.001	15 55 00.8	-11.46	+0.003	1.0590 <i>n</i>	9.9142	9.8078	9.1950 <i>n</i>
447	5223	6*	B	41 29.09	2.787	0.000	14 30 08.3	11.39	+0.03	1.0567 <i>n</i>	9.9153	9.7967	9.1532 <i>n</i>
448	D.M.58°, 1591	7.1	C	42 06	1.2		58 49 21.5	11.35		1.0550 <i>n</i>	9.9161	9.9681	9.6851 <i>n</i>
449	XV, 176	7.0	C	42 24	2.8		14 10 43.5	11.33	-0.10	1.0542 <i>n</i>	9.9165	9.7943	9.1411 <i>n</i>
450	XV, 179	7.0	C	15 42 58	+2.8		13 06 30.1	-11.29		1.0526 <i>n</i>	9.9173	9.7854	9.1061 <i>n</i>
451	5234	4*	A	15 43 06.79	+2.701	-0.002	18 31 44.8	-11.28	-0.031	1.0522 <i>n</i>	9.9174	9.8288	9.2522 <i>n</i>
452	Gr. 2278	7.0	B	43 19.31	1.178		59 42 05.6	11.25	0.05	1.0516 <i>n</i>	9.9177	9.9700	9.6857 <i>n</i>
453	5236	Var.	B	43 25.40	2.469		28 32 28.2	11.25	-0.02	1.0513 <i>n</i>	9.9178	9.8902	9.4284 <i>n</i>
454	R. C. 3453	6.5	C	43 36	1.4		55 51 28.3	11.24		1.0508 <i>n</i>	9.9181	9.9680	9.6665 <i>n</i>
455	XV, 183	6.7*	C	15 43 42	+2.8		12 56 26.2	-11.23	+0.03	1.0506 <i>n</i>	9.9182	9.7842	9.0955 <i>n</i>

(398) Proper motion from Argelander.

(433) = B. A. C. 5178. The south following star. The companion is $-0^{\circ}.48 + 4''.2$ in A. R. and Decl. respectively.(453) Maximum, 6^m ; minimum, 13^m .

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a' .	Log. b' .	Log. c' .	Log. d' .
				<i>h. m. s.</i>			<i>° ' "</i>						
456	5244	4.5*	A	15 44 21.10	+2.519	—0.006	25 27 08.0	—11.19	—0.077	1.0487 n	9.9190	9.8798	9.3954 n
457	5248	5*	C	44 36.80	1.440		55 45 36.0	11.17		1.0480 n	9.9193	9.9688	9.6632 n
458	5249	6.5*	AA	44 45.92	0.892	+0.008	62 59 10.5	11.16	—0.064	1.0476 n	9.9196	9.9719	9.6952 n
459	5252	5*	B	45 46.59	2.635	—0.001	21 21 18.4	11.08	+0.018	1.0447 n	9.9208	9.8498	9.3038 n
460	5259	5.4*	A	15 46 31.28	+2.259	—0.002	36 02 46.4	—11.03	—0.366	1.0426 n	9.9218	9.9244	9.5101 n
461	R. C. 3462	7.3	C	15 46 43	+2.0		42 56 27.5	—11.02		1.0420 n	9.9220	9.9479	9.5731 n
462	5262	6.7*	B	47 22.85	2.801	—0.009	13 35 22.4	10.97	—0.525	1.0401 n	9.9228	9.7913	9.1089 n
463	XV, 206	6.7*	C	47 52	2.7		16 26 53.7	10.93		1.0377 n	9.9234	9.8153	9.1885 n
464	5271	5.4*	B	48 21.17	2.032	+0.036	42 48 08.4	10.89	+0.61	1.0372 n	9.9240	9.9488	9.5672 n
465	5273	6.5	C	15 49 03.98	+2.648	—0.007	20 40 44.0	—10.84	+0.05	1.0351 n	9.9249	9.8470	9.2809 n
466	5279	6*	B	15 49 22.26	+1.390		56 11 48.9	—10.82	+0.08	1.0342 n	9.9252	9.9736	9.6516 n
467	XV, 215	6*	C	50 04	2.7		18 59 16.2	10.77		1.0322 n	9.9261	9.8355	9.2424 n
468	5287	6.5*	B	50 27.94	2.000		43 30 12.5	10.74	+0.052	1.0310 n	9.9266	9.9523	9.5667 n
469	5284	4.3*	A	50 40.79	2.746	+0.023	16 04 16.0	10.72	—1.272	1.0304 n	9.9268	9.8135	9.1704 n
470	5295	6*	A	15 51 14.74	+2.177	+0.004	38 18 32.4	—10.68	+0.077	1.0286 n	9.9275	9.9371	9.5188 n
471	5298	6*	B	15 51 48.25	+2.018	+0.002	42 55 50.4	—10.68	0.00	1.0285 n	9.9276	9.9514	9.5595 n
472	5293	6.5*	A	51 28.68	2.773		14 46 27.8	10.67	+0.10	1.0280 n	9.9278	9.8031	9.1324 n
473	5302	4*	A	52 24.81	2.487	—0.002	27 14 28.1	10.60	—0.062	1.0251 n	9.9289	9.8890	9.3836 n
474	5307	6*	A	53 24.39	1.157		59 16 21.7	10.52		1.0221 n	9.9301	9.9792	9.6542 n
475	5310	6.5*	A	15 54 20.63	+2.211		36 59 58.3	—10.45	+0.03	1.0192 n	9.9312	9.9345	9.4964 n
476	5313	5*	A	15 54 49.47	+1.433	—0.024	55 06 12.7	—10.42	+0.103	1.0177 n	9.9317	9.9773	9.6294 n
477	5316	6*	C	55 31.51	1.696		50 14 18.8	10.36		1.0155 n	9.9325	9.9711	9.5991 n
478	5315	6.5*	A	55 37.30	2.695	—0.004	18 09 55.7	10.36	+0.158	1.0152 n	9.9326	9.8320	9.2069 n
479	5319	6.5*	A	56 15.96	2.307	0.010	33 40 54.3	10.31	—0.784	1.0132 n	9.9334	9.9226	9.4550 n
480	5321	5.4*	A	15 56 26.10	+2.403	—0.007	30 12 07.3	—10.29	—0.022	1.0126 n	9.9336	9.9067	9.4121 n
481	5322	5.4*	A	15 56 54.89	+2.580	+0.004	23 09 10.0	—10.26	+0.019	1.0111 n	9.9341	9.8673	9.3035 n
482	5336	6*	A	58 43.57	2.202		36 58 40.0	10.12		1.0053 n	9.9361	9.9371	9.4824 n
483	5341	6.7*	C	58 54.15	1.524		53 15 48.7	10.11	—0.06	1.0047 n	9.9363	9.9785	9.6064 n
484	5338	5.4*	A	58 54.30	1.859	+0.005	46 23 04.3	10.11	—0.082	1.0047 n	9.9363	9.9659	9.5623 n
485	5348	4.3*	AA	15 59 32.94	+1.154	—0.041	58 53 58.6	—10.06	+0.339	1.0026 n	9.9370	9.9844	9.6331 n
486	5344	7.5	B	15 59 54.21	+2.861	—0.003	10 16 34.0	—10.03	+0.02	1.0014 n	9.9374	9.7645	8.9507 n
487	D.M.59°, 1698	7.2	C	16 1 22	1.1		59 25 52.6	9.92		0.9966 n	9.9390	9.9863	9.6295 n
488	5359	6*	A	1 39.53	2.861	—0.001	10 13 39.6	9.90	—0.014	0.9956 n	9.9393	9.7645	8.9428 n
489	5361	7.3	A	2 08.15	2.857	0.009	10 24 57.5	9.86	0.030	0.9940 n	9.9398	9.7665	8.9491 n
490	5367	5.6*	A	16 2 26	+2.707	—0.005	17 22 52.8	—9.84	—0.014	0.9930 n	9.9402	9.8289	9.1662 n
491	5368	7.0	A	16 2 26.30	+2.706	—0.005	17 23 23.2	—9.84	—0.014	0.9930 n	9.9402	9.8290	9.1664 n
492	Gr. 2309	7.0	C	2 40	1.0		60 22 58.9	9.82		0.9923 n	9.9404	9.9878	9.6293 n
493	5376	6.5	A	3 08.49	2.702	—0.003	17 32 20.0	9.79	—0.019	0.9906 n	9.9409	9.8304	9.1676 n
494	5385	5.4*	A	4 24.10	2.195	0.003	36 48 34.7	9.69	+0.326	0.9864 n	9.9422	9.9405	9.4617 n
495	5388	4*	A	16 4 49.73	+1.889	—0.010	45 15 48.8	—9.66	+0.039	0.9849 n	9.9427	9.9675	9.5342 n
496	5392	6*	B	16 5 49.20	+2.712	0.000	16 59 25.9	—9.58	0.00	0.9814 n	9.9437	9.8271	9.1450 n
497	5406	6.5*	A	5 59.24	0.143		68 08 22.3	9.57	+0.06	0.9809 n	9.9439	9.9900	9.6463 n
498	5399	6*	B	6 18.86	2.554	—0.001	23 49 09.1	9.54	—0.02	0.9797 n	9.9442	9.8763	9.2834 n
499	5400	6.7*	B	6 21.14	1.929	+0.013	44 09 12.7	9.54	—0.324	0.9796 n	9.9443	9.9657	9.5204 n
500	5415	6.7*	B	16 6 36.11	+1.169		58 15 50.3	—9.52	0.00	0.9787 n	9.9445	9.9897	9.6062 n
501	5411	6*	B	16 7 13.92	+2.191		36 44 56.5	—9.47		0.9765 n	9.9452	9.9421	9.4513 n
502	5410	6.7	B	7 28.79	2.780	+0.012	13 51 45.6	9.45	—0.406	0.9756 n	9.9454	9.8011	9.0529 n
503	5417	6.7*	B	7 39.39	1.983		42 41 44.9	9.44		0.9750 n	9.9456	9.9624	9.5041 n
504	5422	6.9	A	9 07.72	2.824	0.000	11 48 31.2	9.33	—0.06	0.9697 n	9.9471	9.7824	8.9786 n
505	5426	6.7*	A	16 9 56.29	+2.660	—0.004	19 07 30.5	—9.26	—0.082	0.9668 n	9.9479	9.8454	9.1800 n
506	5432	6.5*	A	16 9 59.80	+2.266	—0.023	34 10 34.9	—9.25		0.9666 n	9.9479	9.9331	9.4140 n
507	5428	7.5	A	10 06.57	2.825	0.009	11 44 13.2	9.25	+0.047	0.9662 n	9.9480	9.7829	8.9724 n
508	5434	7.0	A	10 56.91	2.556	—0.002	23 26 05.6	9.19	—0.017	0.9631 n	9.9489	9.8760	9.2605 n
509	5440	6.5*	A	11 44.42	2.399	+0.005	29 27 38.6	9.12	—0.03	0.9602 n	9.9496	9.9116	9.3499 n
510	Gr. 2326	6*	C	16 11 58	+0.2		67 27 42.1	—9.11		0.9593 n	9.9499	9.9961	9.6125 n
511	5444	7.5	A	16 12 33.15	+2.542		23 54 48.6	—9.06	+0.035	0.9571 n	9.9504	9.8794	9.2628 n
512	2325	7.0	C	12 44	1.5		53 32 54.3	9.05	—0.03	0.9564 n	9.9506	9.9893	9.5597 n
513	5448	6.5	A	13 12.90	2.483		26 12 08.8	9.01	+0.005	0.9547 n	9.9510	9.8885	9.2975 n
514	5453	8.0	B	13 52.08	0.296	+0.010	66 41 12.9	8.96	—0.025	0.9522 n	9.9517	9.9971	9.6130 n
515	5452	6.7*	B	16 14 39.02	+2.601		21 26 09.2	—8.90		0.9492 n	9.9524	9.8642	9.2099 n
516	5459	6*	A	16 15 10.31	+0.989		60 03 30.5	—8.86		0.9472 n	9.9529	9.9974	9.5828 n
517	5460	6*	C	15 38.48	2.063		40 00 31.4	8.82		0.9454 n	9.9533	9.9589	9.4514 n
518	5461	6.7*	B	15 41.82	1.673		49 20 16.5	8.81		0.9452 n	9.9534	9.9841	9.5230 n
519	5463	3.4*	A	15 59.02	1.800	—0.001	46 36 43.1	8.79	+0.030	0.9441 n	9.9536	9.9783	9.5033 n
520	5466	3.4*	AA	16 16 24.36	+2.647	—0.003	19 26 53.2	—8.76	+0.045	0.9424 n	9.9540	9.8504	9.1626 n

(484) A. R. uncertain.

(485) A. R. not so sure as declination.

(490) B. A. C. 5367. Magnitude 5.5 in D. M.

(502) 5410. Middle point of the double; Dist. 3".0.

(503) A. R. uncertain.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. <i>a'</i> .	Log. <i>b'</i> .	Log. <i>c'</i> .	Log. <i>d'</i> .
				<i>h. m. s.</i>	<i>s.</i>	<i>s.</i>	<i>° ' "</i>	<i>"</i>	<i>"</i>				
521	5473	5*	A	16 17 13.65	+2.342	-0.006	31 11 00.6	-8.70	+0.126	0.9392 _n	9.9548	9.9231	9.3512 _n
522	5479	5.2	B	17 39.08	2.255	-	34 05 40.4	8.66	-0.03	0.9375 _n	9.9552	9.9370	9.3840 _n
523	5480	5.3	B	17 46.66	2.258	-	33 59 43.7	8.65	+0.03	0.9370 _n	9.9552	9.9366	9.3824 _n
524	5484	6.7*	A	18 08.60	2.299	+0.003	32 37 33.7	8.62	+0.01	0.9356 _n	9.9556	9.9305	9.3641 _n
525	5490	5*	A	16 19 38.82	+2.762	+0.002	14 19 21.8	-8.50	-0.031	0.9295 _n	9.9570	9.8092	9.0207 _n
526	5497	7.0	B	16 20 55.24	+1.858	-	44 58 34.6	-8.40	+0.03	0.9244 _n	9.9581	9.9771	9.4715 _n
527	5496	6.5*	A	20 56.98	2.134	+0.001	37 40 47.5	8.40	-0.014	0.9242 _n	9.9581	9.9535	9.4083 _n
528	5499	6.5*	C	21 20.30	1.484	-	52 34 30.0	8.37	-	0.9226 _n	9.9584	9.9936	9.5204 _n
529	5502	6.5*	A	21 41.41	1.303	+0.005	55 29 23.8	8.34	-0.013	0.9212 _n	9.9587	9.9979	9.5350 _n
530	5503	6.9	B	16 21 50.28	+1.515	-	52 00 01.5	-8.33	-	0.9206 _n	9.9589	9.9930	9.5149 _n
531	5514	6.5*	B	16 22 06.36	-0.166	0.00	69 23 54.5	-8.31	0.00	0.9194 _n	9.9591	0.0020	9.5886 _n
532	5509	6.5	C	22 08.15	-0.784	-	61 58 51.6	8.30	-	0.9193 _n	9.9591	0.0032	9.5630 _n
533	5512	3.2*	A	22 18.17	+0.801	+0.005	61 47 50.8	8.29	+0.058	0.9186 _n	9.9593	0.0032	9.5616 _n
534	5504	7.3	B	22 23.57	2.730	-	15 37 49.8	8.28	-	0.9182 _n	9.9594	9.8216	9.0465 _n
535	5507	7.5		16 22 42.69	+2.728	-	15 42 37.4	-8.26	-	0.9168 _n	9.9597	9.8225	9.0472 _n
536	5515	6.7*		16 23 12.57	+2.280	-0.002	32 58 43.5	-8.22	0.00	0.9148 _n	9.9599	9.9347	9.3485 _n
537	5523	Var.	B	24 32.31	1.964	+0.004	42 09 28.8	8.11	+0.04	0.9092 _n	9.9612	9.9710	9.4338 _n
538	5525	2.3*	A	24 50.82	2.583	-0.006	21 45 48.2	8.09	-0.02	0.9078 _n	9.9614	9.8706	9.1748 _n
539	5527	6*	B	25 08.01	2.607	-	20 45 15.1	8.07	-	0.9066 _n	9.9617	9.8634	9.1539 _n
540	Gr. 2351	6.2	C	16 25 32	+1.5	-	51 40 54.9	-8.03	-	0.9049 _n	9.9620	9.9947	9.4974 _n
541	5530	6.5	A	16 25 52.55	+2.564	-	22 27 56.8	-8.01	-	0.9034 _n	9.9623	9.8758	9.1834 _n
542	5529	8.5	C	25 54.57	2.817	-	11 41 39.9	8.00	-	0.9033 _n	9.9623	9.7858	8.9079 _n
543	5535	6.7*	C	26 40.33	1.647	-	49 14 03.7	7.94	-	0.8999 _n	9.9629	9.9907	9.4771 _n
544	Gr. 2354	6.8	B	26 43.44	1.696	-0.015	48 13 56.9	7.94	-0.282	0.8997 _n	9.9630	9.9886	9.4702 _n
545	5532	5.6*	A	16 26 45.36	+2.816	-0.013	11 45 29.0	-7.94	-0.071	0.8996 _n	9.9630	9.7867	8.9066 _n
546	5534	7.1	A	16 26 49.30	+2.250	-0.001	33 46 58.1	-7.93	+0.01	0.8993 _n	9.9631	9.9402	9.3422 _n
547	5537	7.0	B	27 38.29	+2.840	-	10 38 04.0	7.87	-	0.8956 _n	9.9637	9.7754	8.8596 _n
548	5545	5*	A	28 14.06	-0.142	-0.005	69 02 18.4	7.82	0.038	0.8930 _n	9.9642	0.0065	9.5611 _n
549	5541	6.9	A	28 36.84	+2.338	-0.006	30 45 44.6	7.79	-0.03	0.8913 _n	9.9645	9.9264	9.2980 _n
550	5546	6.7*	C	16 29 19.95	+2.095	-	38 20 58.5	-7.73	-	0.8880 _n	9.9651	9.9604	9.3786 _n
551	5549	6.8	B	16 29 39.20	+1.579	-	50 24 19.9	-7.70	-0.04	0.8866 _n	9.9653	9.9945	9.4712 _n
552	5552	4.5*	A	30 04.43	1.931	+0.001	42 41 45.2	7.67	+0.036	0.8846 _n	9.9657	9.9756	9.4138 _n
553	5560	6*	B	30 39.75	0.832	-	61 05 08.1	7.62	-0.03	0.8820 _n	9.9661	0.0084	9.5220 _n
554	5559	7.0	B	30 56.04	1.459	-	52 29 50.3	7.60	-	0.8807 _n	9.9663	9.9993	9.4780 _n
555	XVI, 146	6.8		16 31 22	+0.6	-	63 06 50.6	-7.56	-	0.8787 _n	9.9667	0.0096	9.5268 _n
556	5563	6.0	B	16 32 02.42	+2.763	-	13 56 30.8	-7.51	-0.04	0.8756 _n	9.9672	9.8092	8.9553 _n
557	5568	6.7	C	32 32.48	1.747	-	46 52 02.8	7.47	0.03	0.8732 _n	9.9676	9.9885	9.4342 _n
558	5574	5.3	A	33 14.05	1.414	-0.002	53 09 07.4	7.41	+0.025	0.8699 _n	9.9681	0.0016	9.4710 _n
559	5575	5.0	A	33 16.50	1.412	-0.003	53 10 35.2	7.41	0.02	0.8697 _n	9.9681	0.0017	9.4709 _n
560	5577	6.7*	A	16 35 02.16	+2.794	-	12 38 22.2	-7.27	+0.02	0.8612 _n	9.9694	9.7975	8.8991 _n
561	XVI, 161	7.3	C	16 35 08	+1.6	-	49 06 34.6	-7.26	-0.08	0.8607 _n	9.9695	9.9951	9.4371 _n
562	5596	5*	A	35 21.26	1.628	-0.004	49 10 24.6	7.24	+0.01	0.8597 _n	9.9697	9.9953	9.4364 _n
563	5599	6.5*	C	35 28.92	1.204	-	56 15 38.6	7.23	+0.08	0.8590 _n	9.9698	0.0072	9.4768 _n
564	5601	6.7*	B	35 39.76	0.588	-	63 19 28.0	7.21	-0.12	0.8582 _n	9.9699	0.0122	9.5071 _n
565	5597	6*	B	16 35 49.70	+2.487	-	25 06 04.4	-7.20	-	0.8573 _n	9.9700	9.8970	9.1828 _n
566	5602	6.7*	A	16 36 32.52	+2.430	-	27 09 32.8	-7.14	-0.05	0.8538 _n	9.9705	9.9099	9.2110 _n
567	5604	3.2*	AA	36 34.53	2.296	-0.032	31 49 49.9	7.14	+0.041	0.8536 _n	9.9706	9.9352	9.2736 _n
568	5617	3.4*	A	38 36.69	2.050	+0.006	39 09 40.0	6.97	-0.085	0.8434 _n	9.9720	9.9678	9.3416 _n
569	5615	7.7	A	38 36.95	2.135	-	36 44 42.3	6.97	-	0.8434 _n	9.9720	9.9584	9.3181 _n
570	5619	6.5*	B	16 39 15.12	+2.216	-	34 16 13.2	-6.92	+0.06	0.8401 _n	9.9725	9.9480	9.2885 _n
571	5620	6*	A	16 39 42.88	+2.712	-	15 58 39.4	-6.88	-0.07	0.8377 _n	9.9728	9.8297	8.9753 _n
572	XVI, 194	7.2	C	39 43	0.7	-	62 32 42.1	6.88	-	0.8377 _n	9.9728	0.0143	9.4836 _n
573	5628	5.6*	A	40 03.37	0.398	-	64 49 34.2	6.85	-0.01	0.8359 _n	9.9730	0.0149	9.4904 _n
574	5624	7.2	A	40 06.71	2.386	-	28 35 16.0	6.85	+0.03	0.8356 _n	9.9731	9.9194	9.2133 _n
575	5629	6.3	C	16 40 25	+1.213	-	55 55 14.4	-6.82	+0.09	0.8340 _n	9.9733	0.0094	9.4501 _n
576	5634	7.3	B	16 42 13.44	+2.818	-	11 21 13.0	-6.68	-	0.8245 _n	9.9745	9.7861	8.8165 _n
577	Ril. 5552	5.9	C	42 23	2.8	-	13 48 51.1	6.66	-	0.8236 _n	9.9746	9.8106	8.8994 _n
578	5643	5*	AA	42 55.68	1.127	+0.006	57 00 20.8	6.62	+0.056	0.8207 _n	9.9750	0.0120	9.4421 _n
579	R. C. 3604	6.7	C	43 03	1.2	-	55 32 25.4	6.61	-0.09	0.8200 _n	9.9750	0.0105	9.4340 _n
580	D.M.13° 3228	7.3	C	16 43 13	+2.8	-	13 06 09.0	-6.59	-	0.8191 _n	9.9752	9.8039	8.8724 _n
581	5644	6.7*	B	16 43 19.80	+1.915	-	42 27 45.4	-6.58	-0.03	0.8185 _n	9.9752	9.9813	9.3457 _n
582	5647	6*	B	43 48.42	2.768	-	13 28 51.5	6.54	-	0.8159 _n	9.9755	9.8077	8.8813 _n
583	5658	6*	B	44 17.50	1.222	-	55 37 55.7	6.50	-	0.8132 _n	9.9759	0.0110	9.4277 _n
584	5652	6.7*	A	44 23.57	2.336	-0.005	30 10 49.3	6.50	+0.068	0.8126 _n	9.9759	9.9298	9.2118 _n
585	5667	5*	B	16 45 34.54	+1.750	-0.001	46 12 07.1	-6.40	-0.07	0.8060 _n	9.9767	9.9932	9.3623 _n

(533) No. 381 = B. A. C. 5512 (η Draconis). Mr. Rogers has since investigated the procession of this star in A. R. and finds 0".000.
 (537) 5523. Maximum magnitude, 4^m.9; minimum, 6^m.2. (559) This star's A. R. is very uncertain.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. <i>a</i> '.	Log. <i>b</i> '.	Log. <i>c</i> '.	Log. <i>d</i> '.
				<i>h. m. s.</i>			<i>° ' "</i>						
586	5666	6*	A	16 45 46.27	+2.339	-	30 01 16.1	- 6.38	+0.008	0.8049 _n	9.9768	9.9294	9.2020 _n
587	5674	Var.	A	46 23.39	2.727	+0.001	15 11 07.9	6.33	0.007	0.8014 _n	9.9772	9.8242	8.9175 _n
588	5677	5.6*	A	46 34.33	2.483	-	24 52 04.4	6.32	+0.002	0.8004 _n	9.9773	9.8992	9.1220 _n
589	5686	7.8	C	47 41.08	2.716	-	15 36 56.2	6.22	-	0.7940 _n	9.9780	9.8285	8.9219 _n
590	5692	4.5*	A	16 48 05.60	+2.838	-0.004	10 22 22.1	- 6.19	-0.043	0.7916 _n	9.9783	9.7767	8.7448 _n
591	5693	6.5*	A	16 48 13.59	+2.278	-0.008	31 54 35.2	- 6.18	-0.02	0.7908 _n	9.9783	9.9401	9.2118 _n
592	240	6.3	C	49 30	2.8	-	13 49 25.4	6.07	-	0.7833 _n	9.9791	9.8123	8.8594 _n
593	75 Heis	6.5	C	49 32	2.6	-	21 09 40.9	6.07	-	0.7831 _n	9.9791	9.8743	9.0384 _n
594	Gr. 2389	6.8	B	49 35.47	1.881	+0.015	43 02 28.5	6.06	-0.298	0.7828 _n	9.9792	9.9857	9.3147 _n
595	5702	5.6*	A	16 49 52.52	+2.641	-0.009	18 38 04.1	- 6.04	+0.018	0.7811 _n	9.9794	9.8548	8.9834 _n
596	5703	6.7*	A	16 49 55.22	+2.451	-	25 56 00.4	- 6.04	-0.01	0.7808 _n	9.9794	9.9070	9.1194 _n
597	5706	6.7*	B	50 43.72	1.715	-	46 44 32.1	5.97	-	0.7759 _n	9.9798	9.9968	9.3360 _n
598	5714	6.7*	A	52 23.19	2.460	-	25 32 50.1	5.83	+0.008	0.7657 _n	9.9808	9.9053	9.0983 _n
599	5717	6.7*	B	52 19.75	0.805	-	60 33 46.4	5.82	-	0.76-1 _n	9.9808	0.0197	9.4039 _n
600	5716	6.8	B	16 52 58.58	+2.712	-	15 38 30.8	- 5.78	+0.14	0.7620 _n	9.9812	9.8300	8.8906 _n
601	5728	7.2	B	16 53 31.50	+0.631	-0.051	62 17 56.3	- 5.73	-0.037	0.7585 _n	9.9815	0.0212	9.4035 _n
602	5734	7.0	C	55 06.21	0.599	-	62 33 43.8	5.60	-	0.7484 _n	9.9824	0.0220	9.3944 _n
603	5740	5*	A	55 20.67	0.276	+0.040	65 19 33.1	5.58	+0.048	0.7468 _n	9.9825	0.0228	9.4031 _n
604	5731	3.4*	A	55 30.46	2.296	-0.002	31 06 42.2	5.57	+0.03	0.7457 _n	9.9826	9.9384	9.1568 _n
605	84 Heis Her.	6*	C	16 55 42	+2.5	-	22 49 05.8	- 5.55	-	0.7445 _n	9.9827	9.8877	9.0309 _n
606	5745	6.7	A	16 55 48.61	+0.287	+0.003	65 13 46.2	- 5.54	+0.041	0.7440 _n	9.9827	0.0230	9.4000 _n
607	5732	6.2	B	55 52.09	2.724	-	15 08 01.6	5.54	-	0.7434 _n	9.9828	9.8259	8.8580 _n
608	5747	5*	A	56 59.54	2.211	+0.003	33 45 01.9	5.44	+0.002	0.7359 _n	9.9834	9.9521	9.1788 _n
609	5752	6.7*	A	57 04.02	1.099	-	56 52 21.5	5.44	+0.02	0.7354 _n	9.9834	0.0184	9.3562 _n
610	5749	5.6*	A	16 57 24.25	+2.744	-	14 16 24.8	- 5.41	-0.043	0.7331 _n	9.9836	9.8181	8.8229 _n
611	5753	6.4	B	16 57 54.60	+2.755	-0.004	13 47 04.0	- 5.37	-0.030	0.7297 _n	9.9838	9.8135	8.8046 _n
612	5757	6.6	C	58 12.78	2.756	-0.001	13 44 56.0	5.34	0.164	0.7276 _n	9.9840	9.8133	8.8014 _n
613	5763	6.5	B	59 01.09	2.148	+0.007	35 35 30.5	5.27	-0.05	0.7221 _n	9.9844	9.9611	9.1848 _n
614	Arg. 185	6.6	C	59 05	1.7	-	47 13 47.8	5.27	-	0.7216 _n	9.9845	0.0013	9.2852 _n
615	XVI, 292	6*	C	16 59 15	+2.6	-	19 46 24.9	- 5.25	-	0.7204 _n	9.9846	9.8662	8.9476 _n
616	5765	5*	A	16 59 34.92	+2.775	+0.005	12 54 50.7	- 5.23	+0.005	0.7181 _n	9.9847	9.8053	8.7652 _n
617	XVI, 298	6.8	C	17 0 18	2.8	-	10 37 27.4	5.16	-	0.7130 _n	9.9851	9.7805	8.6766 _n
618	93 Heis Her.	6*	B	1 00.84	2.542	-	22 15 18.6	5.10	-	0.7079 _n	9.9855	9.8853	8.9441 _n
619	5775	6*	B	1 16.50	1.823	-	43 58 59.0	5.08	-	0.7060 _n	9.9856	9.9930	9.2455 _n
620	5776	6.7*	B	17 1 30.71	+1.585	-	48 58 37.3	- 5.06	-0.10	0.7043 _n	9.9857	0.0064	9.2798 _n
621	5777	7.4	B	17 2 12.92	+2.148	-	35 29 26.5	- 5.00	-0.03	0.6992 _n	9.9860	9.9617	9.1609 _n
622	5785	5.4*	A	2 44.64	1.246	-0.012	54 38 08.0	4.96	+0.076	0.6953 _n	9.9863	0.0176	9.3045 _n
623	A. O. 16829	7.0	C	3 20	1.1	-	56 18 00.8	4.91	+0.08	0.6909 _n	9.9866	0.0201	9.3088 _n
624	5786	6.5	A	3 23.54	2.476	-	24 39 02.9	4.90	-0.054	0.6904 _n	9.9866	9.9024	9.0085 _n
625	5788	6.5*	A	17 3 36.22	2.126	-	36 05 55.5	- 4.88	-	0.6888 _n	9.9867	9.9647	9.1569 _n
626	5790	6*	A	17 3 42.11	+1.957	-	40 40 49.8	- 4.88	-0.014	0.6881 _n	9.9868	9.9829	9.2001 _n
627	5787	7.5	B	3 46.40	2.838	-0.007	10 12 13.0	4.87	0.16	0.6876 _n	9.9868	9.7773	8.6337 _n
628	XVII, 7	7.2	C	4 54	2.4	-	26 36 47.7	4.77	-	0.6789 _n	9.9873	9.9154	9.0280 _n
629	5797	6.7	B	5 09.24	0.957	+0.010	58 25 56.1	4.75	-0.09	0.6770 _n	9.9874	0.0232	9.3053 _n
630	5795	6.7*	B	17 5 13.13	+1.467	-	51 00 05.0	- 4.75	-	0.6765 _n	9.9875	0.0120	9.2648 _n
631	5801	6.7	B	17 5 23.82	+1.150	-	55 55 37.8	- 4.73	-	0.6751 _n	9.9876	0.0204	9.2911 _n
632	5798	6*	A	5 52.78	2.482	+0.011	24 23 30.5	4.69	+0.052	0.6713 _n	9.9878	9.9013	8.9851 _n
633	5802	6.5*	B	6 34.29	2.824	-	10 44 18.1	4.63	-0.03	0.6659 _n	9.9881	9.7836	8.6340 _n
634	XVII, 30	6.7*	C	6 40	0.7	-	61 18 56.6	4.62	+0.05	0.6651 _n	9.9881	0.0261	9.3060 _n
635	5823	3*	A	17 8 25.71	+0.162	-	65 52 07.0	- 4.47	+0.022	0.6507 _n	9.9889	0.0282	9.3088 _n
636	5821	Var.	AA	17 8 56.87	+2.733	0.000	14 32 04.0	- 4.43	+0.033	0.6464 _n	9.9891	9.8227	8.7438 _n
637	5828	3*	A	9 53.84	2.462	-0.002	24 59 16.6	4.35	-0.160	0.6384 _n	9.9895	9.9062	8.9620 _n
638	XVII, 37	7.0	C	10 29	2.5	-	23 53 00.1	4.30	-	0.6333 _n	9.9898	9.8988	8.9385 _n
639	5834	3*	A	10 41.67	2.089	-	36 57 04.1	4.28	0.00	0.6315 _n	9.9899	9.9704	9.1083 _n
640	5840	6.5*	A	17 11 28.18	+0.504	+0.006	63 01 02.2	- 4.21	+0.03	0.6247 _n	9.9902	0.0287	9.2725 _n
641	5842	5*	A	17 12 42.47	+2.214	-0.003	33 14 09.9	- 4.11	-0.004	0.6137 _n	9.9907	9.9539	9.0504 _n
642	5841	5*	C	12 44.32	2.814	-	11 00 05.8	4.11	0.087	0.6135 _n	9.9907	9.7873	8.5920 _n
643	5847	5.4*	A	13 21.65	2.068	-0.001	37 25 24.6	4.05	+0.07	0.6077 _n	9.9909	9.9730	9.0893 _n
644	5853	6*	B	13 37.74	1.520	-	49 49 33.6	4.03	-	0.6053 _n	9.9910	0.0122	9.1862 _n
645	XVII, 64	6.5*	C	17 13 54	+2.3	-	28 57 17.0	- 4.01	-0.03	0.6027 _n	9.9912	9.9315	8.9855 _n
646	Gr. 2431	6.0	C	17 14 11	+2.0	-	38 56 26.4	- 3.98	+0.07	0.6000 _n	9.9913	9.9793	9.0962 _n
647	Gr. 2432	6.4	C	14 34	0.7	-	60 50 51.2	3.95	+0.04	0.5965 _n	9.9914	0.0284	9.2355 _n
648	5856	6.5*	B	14 48.35	2.640	-	18 11 15.6	3.93	-	0.5943 _n	9.9915	9.8563	8.7848 _n
649	Gr. 2433	6.7*	C	14 59	0.7	-	60 48 11.8	3.91	-0.03	0.5926 _n	9.9916	0.0285	9.2314 _n
650	XVII, 71	6*	C	17 15 04	+2.4	-	25 39 58.3	- 3.91	-	0.5918 _n	9.9916	9.9116	8.9262 _n

(587) Maximum magnitude, 6.4*; minimum, 12.5*.

(622) No. 447 = B. A. C. 5785 (μ Draconis), middle point between the two stars.

(636) Maximum magnitude, 3.1*; minimum, 3.9*.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. <i>a'</i> .	Log. <i>b'</i> .	Log. <i>c'</i> .	Log. <i>d'</i> .
				<i>h. m. s.</i>			<i>° ' "</i>						
651	5860	6.5*	A	17 15 45.29	+2.470	. . .	24 37 30.3	— 3.85	. . .	0.5852 _n	9.9918	9.9049	8.9028 _n
652	5863	5.6*	A	15 58.97	2.231	+0.011	32 37 47.5	3.83	—1.036	0.5829 _n	9.9919	9.9517	9.0125 _n
653	78	7.7	C	16 33	2.8	. . .	10 19 03.2	3.78	. . .	0.5774 _n	9.9922	9.7802	8.5283 _n
654	5871	6.5*	A	16 49.34	1.694	—0.006	46 21 51.4	3.76	+0.034	0.5747 _n	9.9922	0.0048	9.1322 _n
655	5874	5.6*	B	17 17 37.50	+1.965	. . .	40 05 53.9	— 3.69	—0.10	0.5666 _n	9.9925	9.9846	9.0734 _n
656	5883	6*	B	17 18 52.80	+2.511	. . .	23 04 40.0	— 3.58	—0.048	0.5533 _n	9.9930	9.8948	8.8444 _n
657	94	6*	C	18 55	2.7	. . .	15 43 16.0	3.58	. . .	0.5533 _n	9.9930	9.8352	8.6840 _n
658	95	6.5	C	18 55	2.7	. . .	16 25 04.6	3.58	. . .	0.5533 _n	9.9930	9.8416	8.7024 _n
659	5886	4*	A	19 22.35	2.070	+0.002	37 15 43.4	3.54	+0.003	0.5485 _n	9.9931	9.9737	9.0284 _n
660	2436	6.7	C	17 19 50	+2.0	. . .	38 41 48.2	— 3.50	+0.05	0.5436 _n	9.9933	9.9797	9.0375 _n
661	104	6.5	C	17 20 06	+2.7	. . .	16 29 41.9	— 3.47	+0.04	0.5408 _n	9.9934	9.8424	8.6918 _n
662	5895	6.8	B	20 07.30	2.077	—0.002	37 03 50.6	3.47	. . .	0.5405 _n	9.9934	9.9730	9.0185 _n
663	5902	6.7*	C	21 12.78	1.032	. . .	57 07 31.1	3.38	. . .	0.5286 _n	9.9937	0.0267	9.1516 _n
664	5900	6*	A	21 25.37	2.586	. . .	20 11 19.9	3.36	. . .	0.5263 _n	9.9938	9.8736	8.7621 _n
665	5911	6.5*	A	17 23 25.43	+1.586	—0.001	48 21 56.9	— 3.19	—0.028	0.5033 _n	9.9944	0.0112	9.0747 _n
666	5917	6.5*	B	17 24 04.63	+0.770	. . .	60 09 13.5	— 3.13	+0.06	0.4956 _n	9.9946	0.0305	9.1316 _n
667	5918	6.7*	B	24 12.45	+0.894	. . .	58 45 24.0	3.12	. . .	0.4940 _n	9.9947	0.0292	9.1238 _n
668	2895	6.5	B	25 23.40	—0.106	—0.093	67 24 41.3	3.02	0.00	0.4795 _n	9.9950	0.0332	9.1427 _n
669	B. A. C. 5922	5.4*	A	25 41.17	+2.420	. . .	26 12 23.0	2.99	+0.028	0.4758 _n	9.9951	9.9170	8.8187 _n
670	5927	6*	B	17 26 11.37	+2.269	. . .	31 15 09.1	— 2.95	. . .	0.4694 _n	9.9953	9.9465	8.8823 _n
671	5929	6.5	C	17 26 29.67	+2.001	. . .	38 58 35.7	— 2.92	. . .	0.4655 _n	9.9953	9.9821	8.9620 _n
672	5931	6*	A	26 55.07	2.353	+0.002	28 29 57.7	2.88	+0.057	0.4601 _n	9.9955	9.9312	8.8366 _n
673	5937	3.2*	AA	27 36.53	1.353	—0.002	52 23 40.9	2.82	+0.004	0.4510 _n	9.9956	0.0208	9.0477 _n
674	61 Heis Oph.	6*	C	28 04	2.7	. . .	16 24 29.1	2.78	. . .	0.4448 _n	9.9958	9.8426	8.5936 _n
675	5939	6.5	B	17 28 36.57	+2.759	. . .	13 14 54.5	— 2.74	—0.04	0.4374 _n	9.9959	9.8125	8.4954 _n
676	5941	2*	AA	17 29 07.92	+2.774	+0.008	12 39 09.9	— 2.69	—0.224	0.4302 _n	9.9960	9.8065	8.4685 _n
677	5944	6*	A	29 09.49	1.906	. . .	41 19 58.4	2.69	—0.09	0.4298 _n	9.9961	9.9913	8.9475 _n
678	5942	7.7	B	29 16.75	2.760	. . .	13 13 19.5	2.68	. . .	0.4281 _n	9.9961	9.8123	8.4829 _n
679	5950	5.2	B	29 42.92	1.159	+0.020	55 16 12.5	2.64	+0.038	0.4219 _n	9.9962	0.0261	9.0346 _n
680	5951	5.2	B	17 29 48.28	+1.160	+0.020	55 15 31.1	— 2.63	+0.028	0.4207 _n	9.9962	0.0261	9.0333 _n
681	163	6*	C	17 30 39	+2.6	. . .	21 04 39.4	— 2.56	. . .	0.4084 _n	9.9964	9.8817	8.6621 _n
682	5962	6*	A	31 51.33	2.278	+0.004	30 51 48.9	2.46	. . .	0.3903 _n	9.9967	9.9453	8.7983 _n
683	5967	6*	C	32 22.17	+2.470	. . .	24 23 08.5	2.41	. . .	0.3824 _n	9.9968	9.9028	8.6960 _n
684	5972	5.6*	A	32 27.95	—0.249	—0.005	68 12 51.9	2.40	+0.115	0.3808 _n	9.9969	0.0346	9.0465 _n
685	183	6.7	C	17 33 13	+2.8	. . .	13 23 59.9	— 2.34	+0.03	0.3689 _n	9.9970	9.8144	8.4317 _n
686	5975	6.5*	B	17 33 21.56	+1.562	+0.005	48 39 33.3	— 2.33	+0.044	0.3665 _n	9.9971	0.0138	8.9399 _n
687	5978	6.5*	A	33 42.09	+0.577	+0.038	61 58 13.5	2.30	—0.518	0.3610 _n	9.9971	0.0338	9.0047 _n
688	220	7.9	C	34 58	—0.3	. . .	68 11 48.5	2.19	—0.05	0.3396 _n	9.9974	0.0351	9.0052 _n
689	5986	6*	A	35 14.27	+2.264	. . .	31 16 11.7	2.16	. . .	0.3349 _n	9.9975	9.9478	8.7480 _n
690	B. A. C. 5990	3.4*	A	17 35 56.17	+1.691	0.000	46 04 25.4	— 2.10	0.00	0.3225 _n	9.9976	0.0074	8.8787 _n
691	5988	6.7*	A	17 35 57.44	+2.463	. . .	24 34 34.9	— 2.10	+0.048	0.3222 _n	9.9976	9.9075	8.6390 _n
692	5991	6*	B	36 22.06	2.690	. . .	16 00 42.8	2.06	+0.12	0.3147 _n	9.9977	9.8398	8.4532 _n
693	5994	7.8	C	36 35.25	2.461	. . .	24 38 14.0	2.05	. . .	0.3107 _n	9.9977	9.9080	8.6285 _n
694	5997	6.7*	C	36 50.42	+1.808	. . .	43 31 58.4	2.02	. . .	0.3059 _n	9.9978	9.9999	8.8419 _n
695	237	7.7	C	17 37 09	—0.3	. . .	68 33 34.0	— 2.00	—0.07	0.3001 _n	9.9978	0.0354	8.9665 _n
696	A. Ö. 17420	7.9	C	17 37 18	—0.3	. . .	68 26 58.1	— 1.98	. . .	0.2973 _n	9.9979	0.0354	8.9637 _n
697	5999	6.0	A	37 20.88	+2.461	. . .	24 37 42.5	1.98	—0.10	0.2964 _n	9.9979	9.9080	8.6141 _n
698	6006	5*	AA	37 41.06	—0.362	+0.004	68 48 55.5	1.95	+0.304	0.2899 _n	9.9979	0.0353	8.9574 _n
699	6005	6*	A	38 13.77	+2.438	—0.007	24 23 00.8	1.90	+0.082	0.2792 _n	9.9980	9.9064	8.5928 _n
700	6013	6.7*	C	17 39 23.18	+1.779	. . .	44 08 23.7	— 1.80	. . .	0.2555 _n	9.9982	0.0022	8.7962 _n
701	6021	3.4*	AA	17 41 34.01	+2.369	—0.024	27 47 42.4	— 1.61	—0.746	0.2071 _n	9.9986	9.9287	8.5736 _n
702	154 Heis Her.	6.5*	C	41 37	2.6	. . .	17 44 41.2	1.61	. . .	0.2059 _n	9.9986	9.8556	8.3878 _n
703	Gr. 2464	6.0	C	41 44	2.0	. . .	38 55 54.7	1.60	. . .	0.2032 _n	9.9986	9.9841	8.6903 _n
704	159 Heis Her.	6.5*	C	43 03	2.6	. . .	20 36 31.7	1.48	. . .	0.1708 _n	9.9988	9.8792	8.4151 _n
705	6030	6.7*	B	17 43 22.13	+2.604	. . .	19 17 48.5	— 1.45	+0.04	0.1625 _n	9.9988	9.8687	8.3795 _n
706	6033	6.5*	A	17 43 45.05	+2.430	+0.001	25 39 57.2	— 1.42	—0.04	0.1524 _n	9.9989	9.9155	8.4869 _n
707	6036	6.5*	C	43 46.78	1.608	. . .	47 39 22.3	1.42	. . .	0.1512 _n	9.9989	0.0126	8.7168 _n
708	Ril. 6047	7.2	C	44 13	2.6	. . .	20 40 39.6	1.38	. . .	0.1399 _n	9.9990	9.8798	8.3566 _n
709	166 Heis Her.	6.5*	C	45 32	1.5	. . .	29 21 24.6	1.26	. . .	0.1021 _n	9.9991	9.9382	8.4903 _n
710	6052	5*	B	17 46 05.11	+1.434	—0.007	50 48 41.3	— 1.22	+0.19	0.0852 _n	9.9992	0.0203	8.6708 _n
711	6056	6*	A	17 46 47.08	+1.566	+0.001	48 25 43.5	— 1.15	+0.012	0.0612 _n	9.9993	0.0148	8.6330 _n
712	Gr. 2473	6.7	C	47 10	1.9	. . .	40 06 17.3	1.12	. . .	0.0498 _n	9.9993	9.9890	8.5566 _n
713	6062	6.7*	B	48 00.70	1.950	. . .	40 00 37.5	1.05	+0.056	0.0210 _n	9.9994	9.9888	8.5270 _n
714	Gr. 2481	6.4	C	48 33	1.7	. . .	46 40 36.2	1.00	—0.16	0.0005 _n	9.9995	0.0104	8.5602 _n
715	6068	5*	A	17 49 13.89	+1.949	. . .	40 01 57.6	— 0.93	+0.058	9.9699 _n	9.9995	9.9883	8.4761 _n

(6⁸ No. 476. Proper motion from Argelander.

(690) Mädler's proper motion in A. R. is seriously in error.

(711) A. R. relatively uncertain.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. <i>a'</i> .	Log. <i>b'</i> .	Log. <i>c'</i> .	Log. <i>d'</i> .
				<i>h. m. s.</i>			<i>° ' "</i>						
716	6073	6*	AA	17 50 22.67	+2.418	+0.002	26 04 16.8	-0.84	+0.01	9.9251 _n	9.9996	9.9185	8.2659 _n
717	172 Heis Her.	6*	C	50 36	2.5	-	22 29 05.3	0.82	-	9.9150 _n	9.9996	9.8938	8.1954 _n
718	XVII, 301	6.5	C	51 07	2.6	-	18 37 51.6	0.78	+0.03	9.8904 _n	9.9997	9.8636	8.0927 _n
719	6079	3.4*	A	51 22.10	1.022	+0.014	56 53 34.1	0.75	0.072	9.8784 _n	9.9997	0.0310	8.4993 _n
720	6082	4*	A	17 51 57.98	+2.055	-	37 16 05.8	-0.70	+0.02	9.8469 _n	9.9997	9.9779	8.3269 _n
721	6084	4.3*	A	17 52 54.40	+2.322	+0.005	29 15 45.3	-0.62	-0.021	9.7928 _n	9.9998	9.9381	8.1797 _n
722	6091	2.3*	AA	53 42.26	1.391	0.003	51 30 15.6	0.55	-0.031	9.7409 _n	9.9998	0.0222	8.3324 _n
723	6087	4.5*	A	53 43.30	2.294	+0.004	30 12 03.5	0.55	+0.002	9.7398 _n	9.9998	9.9434	8.1392 _n
724	6095	7.2	C	54 10.71	1.806	-	43 25 46.4	0.51	-	9.7070 _n	9.9999	0.0010	8.2431 _n
725	6094	5*	B	17 54 29.51	+2.687	-	16 45 34.3	-0.48	+0.011	9.6829 _n	9.9999	9.8474	7.8406 _n
726	Gr. 2494	6*	C	17 55 18	+1.7	-	45 29 04.3	-0.41	+0.06	9.6140 _n	9.9999	0.0074	8.1650 _n
727	XVII, 347	6.5	C	56 02	2.2	-	33 13 10.6	0.35	-	9.5404 _n	9.9999	9.9594	7.9748 _n
728	6106	5.4*	A	56 12.00	2.542	-0.001	21 35 51.7	0.33	+0.022	9.5217 _n	9.9999	9.8873	7.7856 _n
729	6109	6.7*	B	56 21.96	1.710	-	45 30 29.1	0.32	-	9.5022 _n	9.9999	0.0075	8.0533 _n
730	6110	5*	A	17 57 02.50	+2.562	-	20 50 05.6	-0.26	+0.016	9.4130 _n	0.0000	9.8815	7.6619 _n
731	6116	6.7	A	17 57 16.64	+2.505	-0.012	22 55 26.0	-0.24	-0.002	9.3770 _n	0.0000	9.8974	7.6659 _n
732	R. C. 3820	6.8	C	57 48	1.6	-	48 28 00.9	0.19	-	9.2841 _n	0.0000	0.0154	7.8562 _n
733	6129	6.7*	B	17 59 52.87	1.562	-	48 27 33.3	-0.01	-	8.0014 _n	0.0000	0.0154	6.5834 _n
734	Rü. 6227	7.3	C	18 0 36	1.7	-	46 26 01.4	+0.05	-	8.7201	0.0000	0.0101	7.2780
735	6134	6*	A	18 0 46.06	+2.524	+0.001	22 13 32.6	+0.07	-0.003	8.8272	0.0000	9.8920	7.1028
736	XVII, 381	6.7	C	18 2 03	+2.8	-	13 03 20.9	+0.18	-	9.2537	0.0000	9.8120	7.3055
737	6147	5*	A	2 16.83	2.282	-0.007	30 32 43.1	0.20	+0.07	9.3001	0.0000	9.9454	7.7040
738	6150	4*	A	2 39.99	2.338	+0.001	28 44 47.6	0.23	-0.006	9.3679	0.0000	9.9352	7.7478
739	6151	6*	A	2 47.17	2.417	-	26 04 48.2	0.24	+0.025	9.3871	0.0000	9.9187	7.7280
740	6152	6*	A	18 2 47.17	+2.417	-	26 05 02.8	+0.24	+0.025	9.3871	0.0000	9.9188	7.7281
741	Rü. 6264	7.2	C	18 3 09	+1.7	-	46 15 31.9	+0.28	-	9.4403	0.0000	0.0097	7.9970
742	6157	4.5*	A	3 24.68	2.563	-0.003	20 47 46.9	0.30	-0.021	9.4749	0.0000	9.8812	7.7230
743	6159	5*	A	3 29.49	2.584	+0.001	20 01 37.4	0.31	-0.011	9.4850	9.9999	9.8751	7.7174
744	6162	5.6*	C	3 42.80	1.805	-	43 26 51.5	0.32	-	9.5117	9.9999	0.0011	8.0169
745	XVIII, 23	6.5	B	18 5 18	-0.1	-	66 55 44.5	+0.46	-	9.6662	9.9999	0.0374	8.3278
746	6177	7.0	C	18 6 02.42	+0.309	-0.009	64 12 09.0	+0.53	+0.01	9.7225	9.9999	0.0370	8.3747
747	201 Heis Her.	6*	C	7 11	2.2	-	33 25 04.4	0.63	-	9.7982	9.9998	9.9603	8.2370
748	6178	5*	A	7 11.98	2.257	+0.004	31 22 31.8	0.63	+0.02	9.7991	9.9998	9.9498	8.2134
749	6184	7.5	C	7 48.62	1.072	-	56 14 19.6	0.68	-	9.8346	9.9998	0.0302	8.4523
750	6185	6*	A	18 7 57.91	+1.216	+0.015	54 14 59.0	+0.70	+0.23	9.8430	9.9997	0.0272	8.4501
751	XVIII, 31	7.0	C	18 8 43	+0.6	-	61 51 03.5	+0.76	-	9.8822	9.9997	0.0358	8.5254
752	Gr. 2529	6*	C	8 44	1.9	-	41 06 57.5	0.76	-0.05	9.8830	9.9997	9.9963	8.3988
753	6193	6*	A	8 54.60	1.999	-	38 44 22.8	0.78	-	9.8918	9.9997	9.9840	8.3860
754	Gr. 2536	6.7	C	11 45	1.5	-	49 06 51.3	1.03	-	0.0119	9.9994	0.0166	8.5883
755	6203	5.6*	A	18 11 45.45	+1.864	-	42 07 03.7	+1.03	+0.004	0.0120	9.9994	9.9964	8.5364
756	6216	6.7*	C	18 12 29.60	+1.051	-	56 32 45.1	+1.09	-	0.0384	9.9994	0.0303	8.6576
757	204 Heis Her.	6*	C	12 38	2.6	-	18 05 05.1	1.10	-	0.0433	9.9993	9.8588	8.2331
758	6218	6*	B	13 08.90	1.916	-0.015	40 53 18.5	1.15	+0.08	0.0608	9.9993	9.9919	8.5746
759	6224	5*	A	13 10.56	0.291	+0.054	64 21 17.8	1.15	-0.002	0.0615	9.9993	0.0365	8.7171
760	D.M.64°, 1253	7.0	C	18 13 42	+0.3	-	64 42 33.9	+1.20	-	0.0784	9.9992	0.0366	8.7325
761	6223	6*	A	18 14 02.11	+2.466	+0.003	24 23 43.9	+1.23	+0.002	0.0889	9.9992	9.9071	8.4028
762	6231	6.5*	A	15 00.64	2.535	0.004	21 54 35.7	1.31	-0.053	0.1181	9.9991	9.8892	8.3878
763	6232	6.5	A	15 02.80	2.313	0.006	29 36 48.3	1.32	0.00	0.1191	9.9991	9.9396	8.5108
764	6235	5.4*	B	15 28.88	2.102	+0.001	36 00 33.2	1.35	+0.023	0.1314	9.9990	9.9720	8.5986
765	6234	7.0	A	18 15 33.32	+2.334	-	28 55 45.7	+1.36	+0.008	0.1335	9.9990	9.9357	8.5160
766	6243	6.7*	A	18 16 00.72	-0.351	+0.003	68 42 37.6	+1.40	-0.06	0.1461	9.9989	0.0362	8.8132
767	6237	6*	A	16 08.22	2.307	-0.001	29 48 02.6	1.41	+0.043	0.1494	9.9989	9.9406	8.5136
768	6238	5*	A	16 08.50	-2.337	-	28 48 42.9	1.41	0.048	0.1496	9.9989	9.9350	8.5304
769	6241	6.7*	A	16 55.91	+2.499	-	23 13 23.1	1.48	+0.075	0.1703	9.9988	9.8987	8.4639
770	6246	6*	B	18 17 00.48	+1.408	-	51 17 37.1	+1.49	-0.04	0.1721	9.9988	0.0210	8.7623
771	6245	6*	C	18 17 17.47	+2.644	-	17 45 54.8	+1.51	-	0.1792	9.9988	9.8558	8.3615
772	6257	6.8	A	17 42.64	-0.346	-0.008	68 41 31.5	1.55	-0.098	0.1898	9.9987	0.0360	8.8569
773	6252	6.5	B	17 59.18	+1.502	-	49 39 54.7	1.57	+0.02	0.1965	9.9987	0.0174	8.7764
774	6255	5*	A	18 20.88	1.535	-	49 03 33.8	1.60	+0.07	0.2051	9.9986	0.0159	8.7811
775	6251	4*	A	18 18 22.23	+2.540	+0.014	21 42 51.8	+1.61	-0.265	0.2056	9.9986	9.8876	8.4717
776	6258	6.8	C	18 18 33.05	+1.411	-	51 14 28.6	+1.62	-	0.2099	9.9986	0.0207	8.7997
777	6272	7.0	B	19 56.32	-0.124	-	67 22 27.1	1.74	0.00	0.2411	9.9984	0.0360	8.9042
778	6268	5*	A	20 06.73	+1.976	-0.002	39 26 24.7	1.76	0.00	0.2449	9.9983	9.9859	8.7457
779	Gr. 2563	6.7	B	20 18.74	1.855	-	42 24 01.6	1.78	-	0.2493	9.9983	9.9965	8.7760
780	8 Heis Lyrae.	6.5*	C	18 21 10	+2.3	-	29 45 31.0	+1.85	-	0.2670	9.9982	9.9400	8.6606

(723) 6106. The middle point of two equal components.

(755) 6203. The A. R. of this star as given in St. is quite erroneous; I first noticed it by observations at Chicago.

(758) 6218. A. R. uncertain.

(773) 6252. A. R. uncertain.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				<i>h. m. s.</i>			<i>° ' "</i>						
781	XVIII, 83	6.5	C	18 21 27	+2.4	- - -	26 23 19.1	+ 1.87	- - -	0.2728	9.9981	9.9197	8.6184
782	XVIII, 84	6.1	C	21 39	2.4	- - -	26 22 36.4	1.89	+0.04	0.2768	9.9981	9.9196	8.6223
783	6289	5*	A	22 05.00	0.880	-0.007	58 43 43.6	1.93	+0.055	0.2854	9.9980	0.0318	8.9151
784	6300	6*	A	24 24.79	2.485	- - -	23 47 04.2	2.13	- - -	0.3288	9.9975	9.9020	8.6323
785	6311	7.2	B	18 24 58.15	+0.804	- - -	59 37 39.5	+ 2.18	- - -	0.3385	9.9974	0.0322	8.9722
786	6316	5.6*	A	18 25 37.39	+0.158	+0.014	65 29 10.2	+ 2.24	-0.043	0.3497	9.9973	0.0351	9.0065
787	6318	6.7*	B	25 58.70	0.819	- - -	59 27 58.3	2.27	- - -	0.3557	9.9972	0.0329	8.9887
788	6322	6*	A	27 34.04	2.493	- - -	23 31 30.4	2.40	+0.02	0.3812	9.9968	9.8999	8.6802
789	Arg. LXIII.	6.5*	B	28 03.15	2.291	- - -	30 27 41.7	2.45	- - -	0.3888	9.9967	9.9431	8.7916
790	Gr. 2597	6.8	C	18 28 47	+1.7	- - -	45 40 54.3	+ 2.51	- - -	0.4000	9.9966	0.0056	8.9524
791	6335	6.5	B	18 29 19.82	+1.373	- - -	52 01 20.6	+ 2.56	- - -	0.4081	9.9964	0.0217	9.0026
792	217 Heis Her.	6*	C	29 42	2.6	- - -	18 06 17.6	2.59	- - -	0.4135	9.9963	9.8577	8.6038
793	Gr. 2603	6.5	C	30 16	1.7	- - -	46 07 18.5	2.64	- - -	0.4217	9.9963	0.0066	8.9773
794	6341	6*	A	30 18.14	2.495	- - -	23 30 20.8	2.64	- - -	0.4222	9.9962	9.8994	8.7208
795	6348	5*	C	18 30 25.06	+1.035	-0.003	56 57 01.5	+ 2.65	- - -	0.4238	9.9962	0.0280	9.0450
796	6350	5.6*	B	18 31 06.52	+1.360	- - -	52 15 18.1	+ 2.71	- - -	0.4335	9.9960	0.0218	9.0294
797	6349	7.3	B	31 10.53	2.006	- - -	38 47 38.4	2.72	-0.015	0.4344	9.9960	9.9818	8.9292
798	XVIII, 133	6.3	C	31 22	2.8	- - -	11 19 05.5	2.74	- - -	0.4371	9.9959	9.7923	8.4278
799	A. Ö. 18414	6.9	C	31 37	1.4	- - -	51 41 00.5	2.76	- - -	0.4405	9.9959	0.0196	9.0330
800	Gr. 2615	7.3	C	18 32 05	+1.8	- - -	42 57 10.3	+ 2.80	- - -	0.4469	9.9957	9.9966	8.9779
801	6355	1*	AA	18 32 42.37	+2.012	+0.019	38 40 06.6	+ 2.85	+0.288	0.4551	9.9956	9.9810	8.9487
802	6357	6.7*	B	33 58.82	1.979	- - -	39 33 33.1	2.96	+0.03	0.4716	9.9952	9.9843	8.9735
803	6364	6.7*	C	35 31.28	1.930	- - -	40 49 18.2	3.10	- - -	0.4907	9.9948	9.9887	9.0040
804	XVIII, 173	6*	A	35 49.56	0.190	- - -	65 22 36.4	3.12	+0.06	0.4944	9.9947	0.0329	9.1508
805	6365	7.2	A	18 35 58.05	+2.030	+0.006	38 15 07.8	+ 3.13	+0.02	0.4961	9.9946	9.9788	8.9857
806	Gr. 2632	6.8	C	18 36 00	+1.4	- - -	52 13 51.7	+ 3.14	- - -	0.4965	9.9946	0.0197	9.0922
807	XVIII, 156	6.7	C	36 01	2.8	- - -	12 08 16.5	3.14	- - -	0.4967	9.9946	9.8006	8.5173
808	6368	7.2	B	36 05.08	1.176	+0.010	55 07 49.0	3.14	+0.05	0.4975	9.9946	0.0246	9.1094
809	XVIII, 174	6*	C	36 26	0.5	- - -	62 24 45.5	3.17	- - -	0.5016	9.9945	0.0318	9.1471
810	6373	6.8	B	18 36 53.28	+0.730	- - -	60 35 45.5	+ 3.21	+0.10	0.5070	9.9944	0.0306	9.1449
811	6372	6*	A	18 37 00.40	+1.378	+0.002	52 04 44.4	+ 3.22	+0.02	0.5083	9.9943	0.0192	9.1032
812	Gr. 2644	6.5	B	39 05.63	1.965	- - -	39 10 32.9	3.40	- - -	0.5321	9.9937	9.9818	9.0304
813	Gr. 2646	6.8	C	39 15	1.8	- - -	44 48 08.2	3.42	- - -	0.5337	9.9936	0.0010	9.0795
814	6393	6*	A	39 50.60	0.528	- - -	62 37 31.6	3.47	+0.03	0.5402	9.9934	0.0311	9.1864
815	6390	4.5*	A	18 40 11.85	+1.984	+0.001	39 32 25.2	+ 3.50	+0.052	0.5438	9.9933	9.9829	9.0456
816	6395	5.6*	A	18 40 12.61	+1.161	-0.001	55 24 47.9	+ 3.50	+0.014	0.5441	9.9933	0.0240	9.1575
817	6391	5.4*	A	40 14.20	1.987	+0.001	39 28 58.3	3.50	+0.064	0.5444	9.9933	9.9826	9.0456
818	6387	4*	A	40 16.97	2.581	0.002	20 25 40.9	3.51	-0.357	0.5449	9.9933	9.8752	8.7856
819	6392	4.5	A	40 28.03	2.062	0.003	37 28 31.5	3.52	+0.01	0.5468	9.9932	9.9746	9.0289
820	6394	5.5	A	18 40 29.95	+2.062	+0.002	37 27 53.5	+ 3.53	+0.01	0.5471	9.9932	9.9746	9.0291
821	Gr. 2659	6.0	C	18 40 49	+1.3	- - -	53 44 40.9	+ 3.55	- - -	0.5505	9.9931	0.0212	9.1549
822	6397	4*	A	41 29.97	2.643	- - -	18 02 37.9	3.61	+0.116	0.5576	9.9928	9.8557	8.7465
823	6404	6*	C	42 13.29	1.916	- - -	41 18 30.9	3.67	- - -	0.5650	9.9926	9.9889	9.0825
824	P. m. 2162	8.1	C	42 32	2.8	- - -	10 37 22.8	3.70	-0.48	0.5682	9.9925	9.7839	8.5317
825	6410	6.7*	A	18 42 49.88	+0.710	+0.005	60 54 57.3	+ 3.73	0.00	0.5712	9.9924	0.0292	9.2105
826	XVIII, 212	7.9	C	18 43 04	+0.6	- - -	61 48 25.5	+ 3.75	- - -	0.5736	9.9923	0.0297	9.2166
827	Gr. 2669	6.1	C	43 26	1.7	- - -	46 10 44.2	3.78	- - -	0.5772	9.9922	0.0039	9.1332
828	XVIII, 203	6*	C	43 26	2.6	- - -	19 11 23.0	3.78	-0.05	0.5772	9.9922	9.8649	8.7918
829	6419	6*	A	43 55.48	1.339	- - -	52 51 05.1	3.82	- - -	0.5820	9.9920	0.0189	9.1814
830	6421	7.0	A	18 44 15.96	+1.546	- - -	49 17 38.7	+ 3.85	- - -	0.5853	9.9919	0.0116	9.1629
831	6428	6*	B	18 44 58.39	+1.583	- - -	48 37 32.5	+ 3.91	+0.08	0.5921	9.9916	0.0098	9.1653
832	6426	6.3	A	45 06.77	2.230	- - -	32 40 12.0	3.92	-0.012	0.5935	9.9915	9.9516	9.0235
833	6427	6.5*	A	45 12.84	2.239	-0.001	32 24 29.3	3.93	-0.002	0.5944	9.9915	9.9503	9.0214
834	6429	Var.	AA	45 27.87	2.213	-0.002	33 13 07.9	3.95	+0.01	0.5968	9.9914	9.9543	9.0333
835	3 Heis. Aquil.	6*	C	18 46 18	+2.7	- - -	13 49 04.4	+ 4.02	- - -	0.6046	9.9911	9.8164	8.6805
836	Gr. 2687	7.2	C	18 46 56	+1.8	- - -	43 48 33.5	+ 4.08	- - -	0.6105	9.9908	9.9960	9.1486
837	6438	5.6	A	46 56.04	2.561	- - -	21 16 33.6	4.08	-0.009	0.6104	9.9908	9.8806	8.8680
838	Gr. 2693	6*	C	48 06	1.9	- - -	41 13 56.2	4.18	- - -	0.6210	9.9904	9.9872	9.1378
839	6452	6*	B	48 47.04	1.349	- - -	52 48 50.7	4.24	+0.25	0.6270	9.9901	0.0174	9.2261
840	6463	5.4*	AA	18 49 21.28	+0.877	+0.008	59 14 09.3	+ 4.28	+0.012	0.6319	9.9898	0.0259	9.2639
841	6456	6*	A	18 49 21.60	+2.094	+0.001	36 48 59.9	+ 4.29	-0.01	0.6320	9.9898	9.9698	9.1075
842	6453	4.5*	A	49 28.26	2.531	- - -	22 29 17.3	4.30	+0.006	0.6330	9.9898	9.8890	8.9134
843	Gr. 2701	7.0	A	49 34.94	1.864	- - -	42 44 50.3	4.30	-0.04	0.6339	9.9898	9.9919	9.1635
844	6466	4.5*	B	50 07.90	2.099	- - -	36 44 27.6	4.35	+0.01	0.6386	9.9895	9.9692	9.1133
845	6470	5.6*	C	18 50 07.63	+1.485	- - -	50 33 13.4	+ 4.35	- - -	0.6386	9.9895	0.0126	9.2242

(791) 6335. A. R. uncertain.

(815) 6390. The south preceding of the close pair.

(816) 6395. A. R. rather uncertain.

(817) 6391. The middle point of the close pair.

(829) 6419. The A. R. from Ay. 60, without P. M.; the star needs re-observing in that co-ordinate.

(834) 6429. Maximum magnitude, 3.5*; minimum, 4.5*.

(840) 6463. The A. R. has been but little observed of late years, and is not very sure.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. <i>a'</i> .	Log. <i>b'</i> .	Log. <i>c'</i> .	Log. <i>d'</i> .
				<i>h. m. s.</i>			<i>° ' "</i>						
846	6468	6.7*	A	18 50 17.70	+2.198	- - -	33 48 36.5	+ 4.37	-0.016	0.6400	9.9895	9.9560	9.0832
847	6473	6*	C	50 51.92	1.919	- - -	41 26 37.7	4.41	- - -	0.6448	9.9892	9.9872	9.1635
848	6476	6*	C	51 29.41	1.588	- - -	48 42 14.1	4.47	-0.12	0.6500	9.9889	0.0081	9.2237
849	6475	Var.	AA	51 31.86	1.822	+0.004	43 46 56.4	4.47	+0.077	0.6504	9.9889	9.9946	9.1883
850	6477	6.3	C	18 51 36.10	+1.039	- - -	57 19 42.6	+ 4.48	- - -	0.6510	9.9889	0.0232	9.2740
851	F. 3047	7.0	C	18 51 56	+0.8	- - -	59 51 31.7	+ 4.51	- - -	0.6537	9.9888	0.0255	9.2884
852	6480	6*	A	52 20.44	2.234	+0.013	32 44 31.3	4.54	-0.178	0.6570	9.9886	9.9503	9.0880
853	6482	6.7*	A	53 02.62	2.753	-0.002	13 44 24.2	4.60	0.051	0.6627	9.9883	9.8147	8.7363
854	6483	5*	A	53 20.43	2.760	- - -	13 27 27.0	4.62	0.118	0.6651	9.9881	9.8119	8.7298
855	6487	4*	AA	18 53 56.93	+2.725	-0.004	14 54 00.2	+ 4.68	-0.082	0.6700	9.9878	9.8257	8.7780
856	6491	3.4*	A	18 54 16.07	+2.243	+0.003	32 31 09.7	+ 4.70	+0.012	0.6724	9.9877	9.9486	9.1007
857	6496	6*	B	54 38.16	1.020	-0.005	57 38 58.8	4.74	-0.067	0.6753	9.9875	0.0224	9.2999
858	42 Heis Lyrae.	6*	C	54 40	2.4	- - -	26 02 32.4	4.74	- - -	0.6756	9.9875	9.9119	9.0159
859	6493	6*	C	54 41.20	1.961	- - -	40 30 31.6	4.74	- - -	0.6757	9.9875	9.9828	9.1862
860	6495	6*	C	18 54 59.76	+2.018	- - -	39 02 43.8	+ 4.77	- - -	0.6781	9.9874	9.9772	9.1753
861	6497	5.6*	A	18 55 17.94	+2.261	+0.003	31 58 18.0	+ 4.79	-0.005	0.6805	9.9872	9.9456	9.1022
862	6500	6.7*	B	55 24.69	0.990	- - -	58 03 13.2	4.80	+0.02	0.6814	9.9872	0.0226	9.3079
863	D.M.20°, 4022	6.0	C	56 00	2.6	- - -	20 39 25.5	4.85	- - -	0.6858	9.9869	9.8750	8.9312
864	6508	6.7*	A	56 01.86	0.608	- - -	62 13 40.1	4.85	-0.05	0.6861	9.9869	0.0256	9.3308
865	46 Heis Lyrae.	6*	C	18 56 13	+2.4	- - -	26 06 55.9	+ 4.87	- - -	0.6875	9.9868	9.9120	9.0290
866	6516	7.2	C	18 57 41.25	+1.640	- - -	47 51 29.8	+ 4.99	- - -	0.6985	9.9861	0.0040	9.2664
867	6520	5.6*	C	57 54.02	1.695	- - -	46 45 30.2	5.01	-0.10	0.7000	9.9860	0.0011	9.2603
868	6522	6*	B	58 14.88	1.190	-0.004	55 28 47.2	5.04	-0.026	0.7026	9.9858	0.0184	9.3163
869	Y. 8113	6.7	C	58 21	2.6	- - -	21 05 07.9	5.05	- - -	0.7033	9.9858	9.8768	8.9572
870	6530	6.3	C	18 59 10.46	+1.412	- - -	52 04 49.6	+ 5.12	- - -	0.7093	9.9854	0.0126	9.3041
871	6527	6.5	A	18 59 24.00	+2.627	- - -	18 57 25.6	+ 5.14	+0.02	0.7109	9.9852	9.8600	8.9204
872	6528	3*	AA	59 39.83	2.757	-0.002	13 40 45.0	5.16	-0.087	0.7128	9.9851	9.8130	8.7844
873	6534	6*	B	19 0 12.14	2.278	- - -	31 33 33.1	5.21	- - -	0.7166	9.9848	9.9421	9.1332
874	Gr. 2761	7.0	C	0 20	0.8	- - -	59 56 37.7	5.22	- - -	0.7175	9.9848	0.0224	9.3526
875	6543	5*	A	19 1 05.53	+2.823	- - -	10 52 49.5	+ 5.28	-0.027	0.7228	9.9844	9.7840	8.6966
876	XIX, 6	6.7	C	19 1 18	+0.6	- - -	62 31 10.9	+ 5.30	- - -	0.7243	9.9843	0.0236	9.3701
877	6542	6*	B	1 25.64	2.495	- - -	24 03 29.9	5.31	- - -	0.7251	9.9842	9.8972	9.0333
878	6547	6.5*	B	1 39.97	2.373	- - -	28 25 58.8	5.33	- - -	0.7268	9.9841	9.9246	9.1023
879	6551	6*	B	2 06.58	1.349	-0.003	53 12 19.3	5.37	+0.007	0.7298	9.9838	0.0134	9.3312
880	6555	7.0	B	19 2 06.82	+0.658	- - -	61 54 24.6	+ 5.37	- - -	0.7298	9.9838	0.0230	9.3732
881	6553	6.5*	A	19 2 41.89	+2.257	+0.009	32 18 21.9	+ 5.42	+0.042	0.7338	9.9835	9.9451	9.1595
882	6556	5*	A	2 50.50	2.139	+0.001	35 54 19.0	5.43	-0.006	0.7348	9.9835	9.9619	9.2008
883	Gr. 2770	7.0	C	3 32	2.0	- - -	38 43 52.2	5.49	- - -	0.7394	9.9831	9.9732	9.2336
884	Gr. 2774	6.9	C	3 59	2.0	- - -	38 57 24.5	5.53	- - -	0.7424	9.9828	9.9740	9.2387
885	6566	7.7	B	19 5 21.60	+1.533	- - -	50 09 46.4	+ 5.64	- - -	0.7514	9.9821	0.0064	9.3345
886	6567	7.3	B	19 5 58.90	+2.288	- - -	31 25 54.3	+ 5.69	- - -	0.7554	9.9817	9.9396	9.1705
887	56 Heis Lyrae.	7.7	C	6 32	2.4	- - -	26 04 19.9	5.74	- - -	0.7586	9.9815	9.9089	9.0994
888	7.5	C	6 39	2.4	- - -	26 02 33.6	5.75	- - -	0.7596	9.9814	9.9087	9.1000	
889	6571	6*	A	6 58.36	2.300	- - -	31 04 34.1	5.78	+0.007	0.7617	9.9812	9.9375	9.1723
890	6574	6*	B	19 7 15.03	+2.571	- - -	21 20 43.3	+ 5.80	- - -	0.7634	9.9810	9.8765	9.0224
891	Rii. 7219	7.0	C	19 7 30	+1.0	- - -	58 04 03.1	+ 5.82	- - -	0.7650	9.9809	0.0177	9.3915
892	F. 3115	6.9	C	7 37	1.0	- - -	58 15 49.8	5.83	- - -	0.7657	9.9808	0.0178	9.3932
893	6579	6*	A	8 50.81	1.570	-0.015	49 37 16.0	5.93	+0.619	0.7733	9.9801	0.0038	9.3530
894	6586	6.7*	A	9 17.54	0.236	- - -	65 46 10.1	5.97	0.02	0.7760	9.9798	0.0206	9.4338
895	6583	6.5*	A	19 9 18.69	+1.133	+0.004	56 38 48.1	+ 5.97	+0.03	0.7761	9.9798	0.0153	9.3958
896	6581	4.5*	A	19 9 30.12	+2.041	-0.001	38 55 54.7	+ 5.99	- - -	0.7773	9.9797	9.9719	9.2740
897	26 Heis Aq.	6*	C	9 38	2.7	- - -	14 52 03.8	6.00	- - -	0.7781	9.9796	9.8223	8.8852
898	6582	6*	A	9 54.22	2.581	+0.004	21 00 54.4	6.02	+0.016	0.7797	9.9795	9.8738	9.0332
899	6589	5.4*	A	10 50.61	2.578	- - -	21 10 15.8	6.10	- - -	0.7853	9.9789	9.8743	9.0409
900	6593	7.0	C	19 11 34	+1.998	- - -	40 08 31.1	+ 6.16	- - -	0.7896	9.9785	9.9755	9.2968
901	6601	5.6	C	19 11 41.16	+1.075	-0.001	57 29 23.8	+ 6.17	-0.113	0.7903	9.9784	0.0152	9.4141
902	6595	6.5*	AA	11 56.93	2.815	- - -	11 22 17.7	6.19	+0.022	0.7918	9.9782	9.7874	8.7845
903	6599	4.5*	A	12 01.75	2.081	+0.001	37 54 43.3	6.20	-0.012	0.7923	9.9782	9.9669	9.2786
904	6603	6.3	B	12 03.61	1.564	- - -	49 51 03.6	6.20	- - -	0.7925	9.9782	0.0029	9.3736
905	F. 3136	6.7	C	19 12 23	+0.9	- - -	59 28 10.9	+ 6.23	- - -	0.7944	9.9780	0.0167	9.4274
906	6602	6.5*	B	19 12 26.26	+2.537	- - -	22 48 06.0	+ 6.23	- - -	0.7947	9.9779	9.8856	9.0809
907	6612	3*	A	12 31.28	0.013	+0.020	67 26 30.1	6.24	+0.093	0.7952	9.9779	0.0188	9.4584
908	Gr. 2809	6*	C	13 16	1.7	- - -	46 45 52.9	6.30	0.26	0.7995	9.9774	9.9951	9.3598
909	6615	6*	B	13 49.36	2.798	-0.004	12 08 44.0	6.35	+0.017	0.8026	9.9771	9.7950	8.8235
910	XIX, 99	7.5	C	19 13 53	+0.1	- - -	66 53 42.6	+ 6.35	- - -	0.8030	9.9770	0.0182	9.4645

(849) Maximum magnitude, 4.3* ; minimum, 4.6*.

(893) 6579. The preceding star, the companion follows +0.75 and is north 7.7 according to Argelander.

(904) 6603. The A. R. is uncertain.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a' .	Log. b' .	Log. c' .	Log. d' .
				<i>h. m. s.</i>			<i>° ' "</i>						
911	6617	6.7*	B	19 14 00.25	+2.818		11 18 17.1	+ 6.36		0.8037	9.9770	9.7863	8.7938
912	6623	4*	AA	14 12.72	1.381	+0.004	53 08 18.5	6.38	+0.105	0.8048	9.9768	0.0081	9.4068
913	6618	6*	C	14 37	2.1		37 12 56.5	6.41		0.8071	9.9766	9.9531	9.2966
914	6624	6.6	B	14 47.35	2.004		40 07 51.5	6.43		0.8081	9.9765	9.9741	9.3151
915	6626	6.3	A	19 15 17.76	+1.598		49 20 18.1	+ 6.47	+0.03	0.8109	9.9761	0.0003	9.3888
916	6629	6.7*	C	19 15 39.57	+0.591	+0.006	62 58 50.9	+ 6.50		0.8130	9.9759	0.0170	9.4606
917	3148	6.7	C	15 56	0.9		59 36 22.7	6.52		0.8144	9.9757	0.0150	9.4481
918	6635	6.7	C	16 50.72	1.324		54 08 39.4	6.60		0.8194	9.9751	0.0084	9.4260
919	6637	6.5*	A	17 43.71	2.456	+0.001	26 01 26.0	6.67	-0.014	0.8242	9.9745	9.9051	9.1643
920	6640	6.0	C	19 17 58.44	+1.100		57 24 35.1	+ 6.69	+0.05	0.8255	9.9744	0.0120	9.4490
921	2829	7.1	C	19 18 34	+1.5		52 08 12.4	+ 6.74		0.8287	9.9740	0.0043	9.4239
922	6642	5.8	B	18 45.26	2.694		16 41 44.9	6.76	+0.005	0.8297	9.9738	9.8364	8.9858
923	2835	6.5	C	18 47	0.4		64 09 15.8	6.76		0.8298	9.9738	0.0156	9.4819
924	6644	5.6*	A	19 00.57	2.811	+0.052	11 40 42.9	6.78	+0.645	0.8310	9.9737	9.7892	8.8351
925	6647	6.7	B	19 19 08.23	+2.693	+0.002	16 42 50.3	+ 6.79		0.8317	9.9736	9.8364	8.9883
926	2833	7.5	C	19 19 09	+1.1		57 31 34.9	+ 6.79		0.8317	9.9736	0.0115	9.4557
927	6648	5.6*	B	19 11.88	2.363	+0.003	29 22 41.5	6.79	+0.013	0.8320	9.9735	9.9241	9.2206
928	6651	6.7	A	19 36.83	2.151		36 12 21.8	6.83	+0.08	0.8342	9.9733	9.9569	9.3034
929	6652	6.7*	B	19 55.56	2.613		20 01 35.8	6.85		0.8358	9.9730	9.8630	9.0683
930	6654	5*	B	19 19 59.35	+2.625	+0.003	19 33 17.8	+ 6.86	-0.066	0.8362	9.9730	9.8594	9.0587
931	6656	6.5*	B	19 19 59.40	+1.894		43 08 44.4	+ 6.86		0.8362	9.9720	9.9819	9.3690
932	6662	5*	A	20 01.31	0.318	-0.001	65 28 26.3	6.86	+0.039	0.8363	9.9730	0.0132	9.4931
933	6659	6.6	C	20 07.03	1.573		50 01 39.6	6.87		0.8368	9.9729	9.9994	9.4191
934	6657	6.5*	A	20 15.43	2.494	-0.013	24 41 17.9	6.88	-0.640	0.8376	9.9728	9.8957	9.1562
935	44 Heis Aqu.	6*	C	19 20 35	+2.8		12 46 22.9	+ 6.91		0.8392	9.9726	9.7995	8.8816
936	6661	6*	A	19 20 45.77	+2.618	-0.001	19 51 03.9	+ 6.92	-0.022	0.8402	9.9725	9.8615	9.0689
937	6663	6.2	A	21 00.45	2.623	-0.005	19 38 39.6	6.94	-0.055	0.8414	9.9723	9.8598	9.0658
938	6667	5*	A	21 38.99	2.159		36 04 05.7	6.99	+0.004	0.8447	9.9718	9.9554	9.3125
939	45 Heis Aqu.	6*	C	21 49	2.8		14 01 53.1	7.01		0.8456	9.9717	9.8116	8.9280
940	2844	6.2	C	19 22 08	+1.8		44 41 04.8	+ 7.03		0.8472	9.9715	9.9854	9.3922
941	2845	6.7	C	19 22 12	+1.8		44 45 46.9	+ 7.04		0.8475	9.9714	9.9855	9.3928
942	XIX, 139	7.4	C	22 27	2.6		19 59 41.1	7.06		0.8488	9.9713	9.8620	9.0805
943	6673	7.0	AA	23 17.02	2.373	-0.002	29 11 47.8	7.13	-0.043	0.8529	9.9707	9.9215	9.2390
944	6674	4.5*	AA	23 30.23	2.504	-0.010	24 24 47.4	7.14	-0.105	0.8540	9.9705	9.8928	9.1682
945	6681	6.5	C	19 23 31.06	+1.090		57 46 33.7	+ 7.15		0.8541	9.9705	0.0096	9.4793
946	48 Heis Aqu.	6*	C	19 23 37	+2.8		14 20 25.7	+ 7.16		0.8546	9.9704	9.8141	8.9463
947	6676	6.4	B	23 44.06	2.502		24 30 43.7	7.16	-0.03	0.8552	9.9703	9.8934	9.1710
948	6678	7.0	A	23 53.72	2.616		20 01 24.6	7.18	-0.01	0.8560	9.9702	9.8618	9.0884
949	6687	6*	A	24 22.25	1.471		52 03 59.2	7.22	-0.047	0.8583	9.9699	0.0011	9.4531
950	D.M.12°, 3940	7.5	C	19 24 43	+2.8		12 33 33.2	+ 7.24		0.8600	9.9696	9.7968	8.8952
951	6690	3*	A	19 25 40.81	+2.418	+0.001	27 41 54.4	+ 7.32	-0.011	0.8647	9.9689	9.9122	9.2298
952	6691	6.5	A	25 43.02	2.418	0.001	27 42 13.7	7.33	-0.003	0.8649	9.9689	9.9122	9.2301
953	6697	4.5*	A	26 33.18	1.511	+0.001	51 27 50.9	7.39	+0.118	0.8689	9.9683	9.9989	9.4600
954	6695	7.0	B	26 36.29	2.602		20 33 54.2	7.40		0.8691	9.9682	9.8657	9.1146
955	6698	5.4*	A	19 27 07.57	+2.228		34 11 17.9	+ 7.44	+0.01	0.8716	9.9678	9.9448	9.3191
956	XIX, 193	6.3	C	19 28 35	+1.3		55 27 58.8	+ 7.56		0.8784	9.9667	0.0039	9.4921
957	6712	6.4	A	29 03.49	1.065	-0.062	58 19 58.4	7.60	-0.39	0.8807	9.9664	0.0067	9.5085
958	6709	5.6*	A	29 05.48	2.633		19 30 06.6	7.60	+0.013	0.8808	9.9663	9.8561	9.1022
959	6711	6.6	C	29 15.10	2.088		38 29 26.0	7.61		0.8816	9.9662	9.9616	9.3735
960	6714	6*	A	19 29 52.84	+2.381		29 11 21.4	+ 7.67		0.8845	9.9657	9.9188	9.2705
961	6717	6*	C	19 30 15.06	+1.651		48 59 27.7	+ 7.70		0.8863	9.9654	9.9919	9.4618
962	D.M.14°, 3974	6.5	C	30 30	2.8		14 07 01.4	7.71		0.8873	9.9652	9.8102	8.9723
963	6718	6.5	C	30 36.67	1.955		42 08 24.0	7.72		0.8878	9.9651	9.9736	9.4123
964	6720	6.8	C	30 46.67	1.894		43 40 18.4	7.74		0.8885	9.9650	9.9781	9.4256
965	61 Heis Aqu.	6*	C	19 30 58	+2.8		10 59 44.6	+ 7.75		0.8894	9.9619	9.7795	8.8677
966	6723	6*	A	19 31 05.46	+1.550		50 58 08.8	+ 7.76	-0.21	0.8900	9.9647	9.9955	9.4781
967	6721	6.5	B	31 06.52	1.707		47 53 34.9	7.76	-0.05	0.8900	9.9647	9.9890	9.4582
968	R. C. 4379	6.2	C	31 12	0.9		59 53 10.0	7.77		0.8905	9.9647	0.0065	9.5253
969	6722	6*	A	31 18.82	2.154	+0.001	36 40 06.2	7.78	+0.01	0.8910	9.9646	9.9535	9.3649
970	6724	6*	A	19 31 37.82	+2.714		16 11 00.7	+ 7.81	+0.010	0.8924	9.9643	9.8283	9.0354
971	6728	6.9	C	19 32 33.62	+1.907		43 25 38.0	+ 7.88		0.8965	9.9636	9.9765	9.4316
972	6730	7.0	A	32 34.92	+1.608	+0.001	49 57 32.7	7.88	+0.04	0.8966	9.9636	9.9926	9.4784
973	6735	5.6*	A	32 35.92	-0.207	+0.103	69 26 54.6	7.88	-1.77	0.8967	9.9635	0.0058	9.6658
974	6731	6.5	C	32 45.42	-1.867	-0.010	44 25 09.6	7.90	-0.09	0.8974	9.9634	9.9792	9.4403
975	6734	5.4*	A	19 33 05.29	+1.611	-0.002	49 55 56.6	+ 7.92	+0.23	0.8980	9.9632	9.9922	9.4805

(922) 6642, 6647. Magnitude combined, 6*.

(966) 6723. A. R. uncertain.

(972) 6730. The value of the proper motion in declination here adopted is taken from the copy of C.

A. which was Tirole's. It well represents Piazz.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. <i>a'</i> .	Log. <i>b'</i> .	Log. <i>c'</i> .	Log. <i>d'</i> .
				<i>h. m. s.</i>			<i>° ' "</i>						
976	6737	6.7*	A	19 33 26.58	+0.616	+0.008	63 09 23.2	+7.95		0.9004	9.9629	0.0065	9.5487
977	6740	5*	A	34 26.31	2.368	-0.001	29 51 59.2	8.03	+0.045	0.9048	9.9620	9.9204	9.2998
978	6741	6.6	C	34 28.39	1.662		48 59 44.5	8.03	0.13	0.9049	9.9620	9.9805	9.4805
979	6739	4.5*	A	34 30.54	2.680	+0.002	17 43 41.0	8.04	+0.005	0.9051	9.9620	9.8403	9.0865
980	67 Heis. Aquil.	6*	C	19 35 18	+2.8		13 31 37.1	+8.10		0.9055	9.9613	9.8033	8.9754
981	6745	6.5*	B	19 35 22.37	+1.950	+0.004	42 31 49.6	+8.11	+0.05	0.9087	9.9613	9.9722	9.4365
982	6744	4.5*	A	35 26.03	2.693	+0.001	17 11 15.9	8.11	-0.039	0.9091	9.9612	9.8355	9.0775
983	6748	6.5*	B	35 52.54	1.347		54 40 51.2	8.15	+0.05	0.9110	9.9608	9.9984	9.5205
984	6747	6.9	A	36 20.97	2.814	-0.001	11 54 04.4	8.19		0.9130	9.9604	9.7873	8.9251
985	6749	6.5*	B	19 36 41.11	+2.823	+0.001	11 32 02.0	+8.21	+0.018	0.9144	9.9602	9.7836	8.9132
986	6750	7.0	B	19 36 45.20	+2.671		18 10 21.3	+8.22	+0.01	0.9147	9.9601	9.8431	9.1065
987	6754	6.5*	A	36 58.81	1.842	+0.011	45 13 46.8	8.23	+0.09	0.9156	9.9599	9.9790	9.4647
988	2923	7.0	B	37 51.58	1.001		59 32 55.2	8.31	-0.07	0.9193	9.9592	0.0020	9.5527
989	6763	6.3	B	38 29.45	1.611	-0.021	50 14 08.6	8.35	-0.016	0.9219	9.9586	9.9896	9.5055
990	6758	6*	A	19 38 31.10	+2.492	+0.002	25 28 26.6	+8.36	+0.024	0.9220	9.9586	9.8936	9.2535
991	6764	6.2	B	19 38 32.32	+1.612	-0.003	50 13 41.6	+8.36	-0.164	0.9221	9.9586	9.9896	9.5057
992	6759	6.7*	A	38 45.27	2.791		13 00 16.3	8.38		0.9230	9.9584	9.7974	8.9731
993	6761	7.4	B	38 46.75	2.792		12 55 54.1	8.38		0.9231	9.9584	9.7967	8.9708
994	6765	6.7	C	38 46.79	2.109		38 22 28.5	8.38		0.9231	9.9584	9.9563	9.4139
995	6762	6.8	A	19 38 48.63	+2.455	-0.002	26 50 15.5	+8.38		0.9232	9.9583	9.9016	9.2757
996	6769	6.0	C	19 39 34.64	+1.999		41 28 26.7	+8.44		0.9264	9.9576	9.9665	9.4453
997	6771	5.6*	A	39 46.09	2.156	+0.007	37 03 12.2	8.46	+0.033	0.9272	9.9575	9.9507	9.4050
998	6772	3*	AA	40 18.98	2.851	0.002	10 18 36.4	8.50	+0.002	0.9294	9.9570	9.7701	8.8803
999	6780	6.2	C	40 48.44	1.156	0.020	57 43 08.5	8.54	-0.06	0.9314	9.9566	9.9986	9.5563
1000	6779	3.2*	AA	19 41 04.04	+1.869	+0.005	44 49 35.7	+8.56	+0.04	0.9324	9.9563	9.9756	9.4784
1001	6777	6.7*	B	19 41 11.73	+2.234		34 42 33.5	+8.57		0.9329	9.9562	9.9403	9.3862
1002	6784	5.6*	A	41 40.86	2.274		33 26 16.2	8.61	-0.433	0.9349	9.9558	9.9348	9.3739
1003	6783	4*	B	41 48.94	2.674	+0.006	18 13 38.8	8.62	+0.036	0.9354	9.9557	9.8417	9.1285
1004	6789	6*	A	42 48.57	2.826		11 30 22.7	8.70	-0.006	0.9394	9.9548	9.7817	8.9371
1005	6791	6.8	B	19 42 59.60	+2.829		11 22 28.4	+8.71		0.9401	9.9546	9.7803	8.9329
1006	6794	5.6*	A	19 43 25.76	+2.661	+0.004	18 49 47.6	+8.75	+0.032	0.9418	9.9542	9.8458	9.1485
1007	6799	6*	C	43 47.70	1.755		47 35 58.3	8.78		0.9432	9.9538	9.9807	9.5094
1008	6800	6.9	C	44 04.36	+2.287		33 07 32.5	8.80		0.9443	9.9536	9.9317	9.3797
1009	6808	6*	A	44 28.44	-0.061	-0.005	69 01 53.3	8.83	-0.05	0.9458	9.9532	9.9972	9.6139
1010	2946	7.0	B	19 44 54.23	+1.250		56 36 07.3	+8.86		0.9475	9.9528	9.9947	9.5670
1011	6806	6.8	B	19 45 02.06	+2.121	+0.002	38 23 46.9	+8.87		0.9480	9.9527	9.9528	9.4390
1012	6805	6.5*	B	45 02.28	2.857	+0.016	10 06 16.0	8.87	-0.148	0.9480	9.9527	9.7668	8.8900
1013	6810	6.5*	A	45 41.08	2.580	-0.001	22 17 37.0	8.92	-0.011	0.9505	9.9521	9.8699	9.2274
1014	χ Cygni.	Var.	A	45 45.74	2.306		32 35 57.7	8.93		0.9508	9.9520	9.9284	9.3800
1015	6818	6.5	B	19 46 01.69	+1.072		59 06 19.2	+8.95	+0.14	0.9518	9.9518	9.9959	9.5832
1016	6813	6*	B	19 46 08.24	+2.123	+0.001	38 24 06.4	+8.96	+0.107	0.9522	9.9517	9.9522	9.4432
1017	XIX, 396	6.7*	C	46 13	2.8		11 19 15.0	8.96	-0.31	0.9525	9.9516	9.7789	8.9433
1018	XIX, 307	6.7*	C	46 18	2.9		10 01 57.3	8.97		0.9528	9.9515	9.7657	8.8917
1019	6817	6*	B	46 19.89	2.058		40 16 57.4	8.97	-0.02	0.9529	9.9515	9.9586	9.4614
1020	6819	6.7*	A	19 46 47.32	+2.675		18 21 06.7	+9.01	-0.003	0.9547	9.9510	9.8408	9.1506
1021	XIX, 312	8.0	C	19 47 05	+2.7		18 25 11.8	+9.03		0.9558	9.9508	9.8412	9.1533
1022	6824	5.6*	B	47 29.56	1.507	-0.004	52 40 16.9	9.06	-0.08	0.9573	9.9504	9.9878	9.5556
1023	Gr. 2957	6.2	C	47 35	1.8		47 03 23.4	9.07		0.9577	9.9503	9.9770	9.5200
1024	XIX, 6320	7.2	B	47 52.58	2.636		20 00 50.4	9.09	+0.04	0.9588	9.9500	9.8529	9.1909
1025	827	5*	A	19 48 08.86	+2.547	+0.003	23 45 17.0	+9.12	+0.035	0.9598	9.9497	9.8785	9.2622
1026	6830	6*	B	19 48 26.18	+1.768		47 36 36.1	+9.14		0.9608	9.9495	9.9777	9.5270
1027	6834	6.1	A	48 26.43	+0.934		60 53 16.4	9.14	+0.05	0.9608	9.9495	9.9951	9.6000
1028	6836	4.3*	AA	48 35.18	-0.188	+0.016	69 56 58.2	9.15	+0.022	0.9614	9.9493	9.9933	9.6321
1029	6835	6*	A	49 12.85	+2.542	+0.005	23 59 34.6	9.20	-0.017	0.9637	9.9487	9.8795	9.2707
1030	6838	5.6*	A	19 50 18.95	+2.839		11 05 36.8	+9.29	+0.023	0.9678	9.9476	9.7755	8.9498
1031	6839	6.5*	A	19 50 20.51	+2.724		16 18 18.7	+9.29	+0.013	0.9678	9.9476	9.8230	9.1140
1032	6847	5.6*	B	50 43.49	1.234	+0.002	57 11 46.8	9.32	0.00	0.9692	9.9472	9.9910	9.5916
1033	Gr. 2978	7.5	C	50 44	1.2		57 50 22.5	9.32		0.9692	9.9472	9.9915	9.5947
1034	R. C. 4507	6.8	C	51 20	2.1		39 50 30.6	9.36		0.9714	9.9466	9.9541	9.4758
1035	6852	6*	B	19 51 20.86	+1.074		59 22 42.3	+9.36		0.9714	9.9466	9.9921	9.6040
1036	Gr. 2977	6.7	C	19 51 21	+1.8		47 12 37.4	+9.36		0.9714	9.9466	9.9748	9.5349
1037	6849	5.6*	B	51 23.73	2.143		38 09 20.1	9.37		0.9716	9.9465	9.9481	9.4603
1038	6851	4.5*	B	51 36.96	2.252	-0.003	34 45 08.5	9.39	-0.023	0.9724	9.9463	9.9346	9.4261
1039	6853	6*	B	52 04.92	2.723	+0.001	16 27 14.2	9.42	+0.033	0.9741	9.9459	9.8236	9.1241
1040	6856	5.6*	A	19 52 23.84	+1.556	-0.003	52 06 27.9	+9.44	-0.05	0.9752	9.9455	9.9835	9.5702

(983) 6748. All observations except Groombridge are better represented with P. M. + 0".14. Declination 1875, 54° 40' 52".8.

(987) 6754. A. R. less sure than declination.

(989) 6763, 6765. Combined magnitude, 6.5*.

(1014) Maximum, 4*; minimum, 13*.

(1039) No. 713 = B. A. C. 6856. Prof. Auwers's correction to Bessel is + 5".7 from 2 observations. This is nearly confirmed by 22 sector observations, which give + 3".4.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. <i>a'</i> .	Log. <i>b'</i> .	Log. <i>c'</i> .	Log. <i>d'</i> .
				<i>h. m. s.</i>			<i>° ' "</i>						
1011	R. C. 6855	7.0	A	19 52 33.08	+2.730	+0.007	16 09 29.5	+ 9.46	- . . .	0.9757	9.9454	9.8210	9.1181
1042	4521	6.5	C	52 31	1.1	- . . .	59 16 11.6	9.46	- . . .	0.9759	9.9453	9.9911	9.6080
1043	6861	6.8	A	52 41.07	0.989	- . . .	60 29 33.3	9.47	- . . .	0.9762	9.9452	9.9916	9.6137
1044	6862	6.6	C	52 45.12	1.007	- . . .	60 17 00.2	9.47	- . . .	0.9764	9.9452	9.9915	9.6130
1045	6863	6.3	C	19 52 53.18	+1.192	- . . .	57 55 14.0	+ 9.48	-0.07	0.9769	9.9450	9.9399	9.6028
1046	6857	6.5	B	19 52 53.27	+2.082	- . . .	40 01 58.3	+ 9.48	- . . .	0.9769	9.9450	9.9538	9.4831
1047	6860	6.8	C	53 00.31	2.147	- . . .	38 07 22.0	9.49	- . . .	0.9773	9.9449	9.9470	9.4657
1048	6858	4.3*	A	53 11.84	2.662	+0.005	19 09 14.0	9.51	+0.034	0.9780	9.9447	9.8443	9.1919
1049	6865	6.7*	C	53 19.90	1.640	- . . .	50 34 02.0	9.52	- . . .	0.9785	9.9446	9.9802	9.5642
1050	6867	6.5*	C	19 53 32.20	+1.151	- . . .	58 30 46.2	+ 9.53	- . . .	0.9792	9.9444	9.9898	9.6079
1051	XIX, 6869	6*	B	19 53 33.95	+0.618	-0.003	61 23 19.4	+ 9.53	-0.035	0.9793	9.9443	9.9916	9.6322
1052	370	6*	C	53 36	1.3	- . . .	56 21 05.2	9.54	- . . .	0.9795	9.9443	9.9880	9.5977
1053	6866	6*	A	53 48.72	2.577	-0.004	22 45 44.8	9.55	+0.02	0.9802	9.9441	9.8694	9.2656
1054	6868	6*	A	54 24.59	2.708	- . . .	17 10 34.8	9.60	- . . .	0.9823	9.9435	9.8285	9.1504
1055	XIX, 362	7.5	C	19 54 30	+2.7	- . . .	17 16 10.9	+ 9.61	- . . .	0.9826	9.9434	9.8292	9.1530
1056	6875	6.5*	A	19 55 20.13	+2.198	- . . .	36 42 04.6	+ 9.67	+0.027	0.9856	9.9425	9.9402	9.4597
1057	6876	6*	C	55 24.82	1.882	- . . .	45 25 55.7	9.68	- . . .	0.9857	9.9424	9.9678	9.5363
1058	6881	6.5*	C	55 56.74	1.590	+0.006	51 42 50.1	9.72	- . . .	0.9875	9.9419	9.9802	9.5802
1059	6879	5*	A	55 57.11	2.465	+0.003	27 24 33.7	9.72	+0.028	0.9876	9.9419	9.8964	9.3485
1060	6882	6.2	B	19 56 26.90	+2.540	- . . .	24 27 17.2	+ 9.76	-0.008	0.9893	9.9414	9.8789	9.3041
1061	XIX, 391	7.5	C	19 56 27	+1.2	- . . .	57 28 03.3	+ 9.76	- . . .	0.9893	9.9413	9.9867	9.6130
1062	6883	6.5*	A	56 43.24	2.537	+0.005	21 35 20.6	9.78	+0.054	0.9902	9.9411	9.8796	9.3072
1063	Gr. 3019	6.5	B	56 51.77	0.762	- . . .	63 11 35.6	9.79	-0.025	0.9908	9.9409	9.9888	9.6393
1064	Gr. 3013	7.0	C	57 31	2.1	- . . .	40 30 41.8	9.84	- . . .	0.9929	9.9402	9.9523	9.5034
1065	Gr. 3014	6.8	C	19 57 42	+2.0	- . . .	43 46 21.5	+ 9.85	- . . .	0.9935	9.9400	9.9618	9.5313
1066	6890	6.5*	A	19 57 46.82	+2.741	- . . .	15 40 55.2	+ 9.86	+0.008	0.9938	9.9399	9.8150	9.1234
1067	6895	5.6*	A	57 49.35	1.693	+0.001	49 45 27.1	9.86	-0.004	0.9939	9.9399	9.9754	9.5744
1068	6896	7.0	B	58 18.90	2.721	-0.002	16 46 16.5	9.90	- . . .	0.9956	9.9394	9.8237	9.1536
1069	6897	6*	A	58 29.21	2.722	-0.029	16 43 58.8	9.91	-0.383	0.9961	9.9392	9.8233	9.1532
1070	XIX, 394	7.2	C	19 58 36	+2.7	- . . .	17 23 01.2	+ 9.92	- . . .	0.9935	9.9391	9.8235	9.1697
1071	6901	5.6*	B	19 59 36.84	+2.658	+0.004	19 38 03.1	+10.00	+0.087	0.9999	9.9380	9.8451	9.2241
1072	6905	6.5*	A	20 0 08.83	0.618	- . . .	64 28 15.9	10.01	-0.018	1.0016	9.9374	9.9860	9.6549
1073	XX, 1	8.5	C	0 51	0.7	- . . .	61 18 24.6	10.09	- . . .	1.0039	9.9366	9.9853	9.6665
1074	6913	6.5	B	0 56.65	+0.679	+0.003	64 16 54.6	10.10	+0.012	1.0042	9.9365	9.9853	9.6568
1075	6912	5.6*	A	20 1 31.09	2.576	- . . .	23 15 19.2	+10.14	-0.005	1.0061	9.9359	9.8688	9.3003
1076	6918	6*	C	20 1 43.28	+1.623	- . . .	51 28 54.1	+10.16	+0.05	1.0067	9.9356	9.9754	9.5980
1077	6915	6.5*	B	1 43.14	2.245	-0.019	35 37 45.1	10.16	-0.42	1.0067	9.9356	9.9319	9.4699
1078	6926	5*	A	2 14.91	0.290	+0.003	67 31 01.8	10.20	+0.015	1.0084	9.9350	9.9830	9.6719
1079	XIX, 420	6.5	C	2 25	2.7	- . . .	16 18 08.9	10.21	- . . .	1.0090	9.9349	9.8183	9.1550
1080	6924	6.5	C	20 2 30.95	+1.367	- . . .	55 58 46.1	+10.22	- . . .	1.0093	9.9347	9.9806	9.6256
1081	103 Heis. Aq. 6923	6*	C	20 2 40	+2.9	- . . .	10 21 47.0	+10.23	- . . .	1.0098	9.9346	9.7646	8.9626
1082	6923	6*	A	2 56.38	1.558	+0.027	52 47 48.8	10.25	+0.26	1.0103	9.9343	9.9763	9.6096
1083	6930	6.5	C	3 10.07	0.765	- . . .	63 31 52.0	10.27	+0.07	1.0114	9.9340	9.9833	9.6611
1084	6927	6.8	B	3 16.56	2.612	-0.006	21 47 29.3	10.27	-0.15	1.0117	9.9339	9.8584	9.2792
1085	XX, 2	7.0	C	20 3 27	+2.7	- . . .	16 32 43.5	+10.29	- . . .	1.0123	9.9337	9.8198	9.1646
1086	6932	6*	B	20 3 33.35	+0.947	+0.017	61 37 58.3	+10.29	+0.05	1.0126	9.9336	9.9829	9.6549
1087	6939	7.0	C	4 20.96	0.285	+0.003	67 40 02.6	10.36	-0.04	1.0151	9.9327	9.9809	9.6791
1088	6933	6*	A	4 25.68	2.672	0.006	20 32 41.6	10.36	+0.102	1.0154	9.9326	9.8493	9.2584
1089	6937	5.6*	A	4 47.11	2.226	- . . .	36 28 21.9	10.39	+0.047	1.0165	9.9322	9.9334	9.4884
1090	6940	6.5*	A	20 5 20.38	+2.501	- . . .	26 32 05.1	+10.43	-0.002	1.0182	9.9315	9.8864	9.3661
1091	6941	6.3	A	20 5 33.37	+2.618	+0.002	20 45 49.3	+10.44	+0.032	1.0189	9.9313	9.8503	9.2663
1092	6943	6*	A	6 34.54	2.505	- . . .	26 26 13.6	10.52	-0.016	1.0220	9.9301	9.8851	9.3684
1093	6944	6*	A	6 46.23	2.514	+0.002	26 06 24.6	10.53	-0.019	1.0226	9.9299	9.8831	9.3640
1094	R. C. 4639	6.8	B	6 57.75	0.959	- . . .	61 42 28.7	10.55	-0.06	1.0232	9.9296	9.9798	9.6658
1095	6952	5*	A	20 8 29.45	+2.772	- . . .	14 49 05.9	+10.66	+0.075	1.0279	9.9278	9.8035	9.1335
1096	6959	6*	B	20 9 03.06	+1.671	- . . .	51 05 18.1	+10.70	- . . .	1.0295	9.9272	9.9687	9.6184
1097	6957	6*	A	9 06.41	2.462	+0.002	28 19 02.2	10.71	-0.03	1.0297	9.9271	9.8938	9.4037
1098	6952	5.0	A	9 22.32	1.843	0.003	46 26 17.9	10.73	-0.022	1.0305	9.9268	9.9596	9.5885
1099	6933	6.7	C	9 30.37	2.018	- . . .	43 00 01.7	10.74	-0.03	1.0309	9.9266	9.9510	9.5625
1100	6970	6*	A	20 9 31.91	+0.975	+0.018	61 42 01.0	+10.74	+0.05	1.0310	9.9266	9.9774	9.6735
1101	D.M.59°, 2193	6.5	C	20 9 35	+1.2	- . . .	59 18 44.2	+10.74	- . . .	1.0311	9.9265	9.9766	9.6634
1102	6965	4*	A	9 41.71	1.888	- . . .	46 21 46.6	10.75	0.00	1.0315	9.9234	9.9592	9.5889
1103	XX, 63	7.5	C	9 43	1.9	- . . .	46 20 00.6	10.75	- . . .	1.0315	9.9264	9.9591	9.5887
1104	6967	5*	A	9 51.14	2.239	+0.004	36 25 28.5	+10.76	+0.09	1.0319	9.9262	9.9295	9.5031
1105	6966	5*	A	20 9 58.03	+2.540	- . . .	25 12 41.5	+10.77	- . . .	1.0323	9.9261	9.8761	9.3595

(1067) 6895. The A. R. is relatively ill-determined.

(1098) 6962, 6935. Combined magnitude, 4^m.5.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0. h. m. s.	Annual precession.	Proper motion.	Declination, 1875.0. ° ' "	Annual precession.	Proper motion.	Log. <i>a'</i> .	Log. <i>b'</i> .	Log. <i>c'</i> .	Log. <i>d'</i> .
1106	6969	7.0	A	20 9 59.22	+2.240	+0.001	36 22 20.5	+10.77	+0.048	1.0323	9.9260	9.9292	9.5033
1107	6968	6.5*	A	10 06.26	2.590	-0.002	23 07 40.8	10.78	-0.018	1.0327	9.9259	9.8635	9.3247
1108	6976	4.5*	A	10 29.45	1.390	+0.010	56 11 08.7	10.81	+0.065	1.0338	9.9254	9.9737	9.6512
1109	6973	5*	A	10 35.33	2.486	-0.003	27 25 54.8	10.82	+0.012	1.0341	9.9253	9.8832	9.3954
1110	6975	6*	A	20 10 50.24	+2.635	-	21 12 59.9	+10.84	-0.021	1.0349	9.9250	9.8505	9.2913
1111	6980	6.0	B	20 11 09.71	+1.105	+0.009	60 15 30.9	+10.86	+0.038	1.0358	9.9246	9.9755	9.6723
1112	6978	7.1	A	11 15.72	2.489	-	27 23 32.2	10.86	-	1.0361	9.9245	9.8876	9.3968
1113	6979	6.5*	A	11 26.17	2.564	0.003	24 17 14.2	10.88	-0.018	1.0366	9.9243	9.8698	9.3486
1114	Gr. 3105	6.5	C	11 31	2.2	-	38 30 56.8	10.89	-	1.0369	9.9242	9.9358	9.5290
1115	6983	5.4*	A	20 11 36.48	+1.852	+0.002	47 19 51.7	+10.89	0.00	1.0371	9.9241	9.9607	9.6014
1116	Gr. 3110	6*	C	20 11 57	+1.9	-	45 11 52.2	+10.92	-	1.0382	9.9236	9.9546	9.5870
1117	6985	6.3	B	12 05.11	1.742	-	49 50 55.1	10.93	-	1.0385	9.9235	9.9541	9.6195
1118	6986	6.5*	B	12 28.62	2.132	+0.011	39 58 45.1	10.95	-	1.0396	9.9230	9.9398	9.5454
1119	6994	6.9	B	12 40.53	0.738	-0.007	64 22 50.9	10.97	0.00	1.0402	9.9228	9.9742	9.6931
1120	6990	Var.	A	20 13 10.77	+2.208	-	37 38 42.5	+11.01	-	1.0417	9.9221	9.9315	9.5254
1121	6996	6.7*	B	20 13 41.40	+2.123	+0.002	40 20 35.4	+11.05	-0.007	1.0432	9.9215	9.9400	9.5592
1122	6997	6*	A	13 47.66	2.242	0.006	36 36 34.2	11.05	+0.03	1.0434	9.9214	9.9273	9.5168
1123	6998	5.6*	A	13 51.09	2.302	+0.001	34 35 35.2	11.06	+0.003	1.0436	9.9213	9.9195	9.4956
1124	7001	7	C	14 24.52	2.182	-	38 36 49.6	11.10	-	1.0452	9.9206	9.9339	9.5333
1125	114 Heis. Aq.	6*	C	20 14 41	+2.7	-	17 24 04.1	+11.12	-	1.0460	9.9203	9.8215	9.2196
1126	7007	8.0	B	20 14 56.91	+1.787	-	49 06 23.0	+11.14	-0.067	1.0468	9.9199	9.9603	9.6231
1127	7006	7.0	A	15 07.72	2.242	+0.003	36 44 23.7	11.15	+0.01	1.0472	9.9197	9.9268	9.5219
1128	3142	6.5*	C	15 19	1.5	-	55 00 25.5	11.16	-	1.0478	9.9194	9.9682	9.6590
1129	7008	6.8	A	15 43.38	2.172	-	39 00 36.1	11.19	-	1.0489	9.9189	9.9342	9.5458
1130	7017	6*	A	20 16 17.43	+0.530	+0.089	66 27 06.9	+11.23	+0.269	1.0505	9.9182	9.9097	9.7106
1131	7013	6*	A	20 16 40.96	+2.577	-	24 02 54.9	+11.26	+0.011	1.0516	9.9177	9.8853	9.3596
1132	7024	6*	B	17 31.35	1.008	+0.001	61 51 38.0	11.32	-0.003	1.0540	9.9166	9.9696	9.6972
1133	7022	2.3*	A	17 44.52	2.151	0.003	39 51 27.2	11.34	+0.017	1.0546	9.9163	9.9353	9.5592
1134	7027	6*	B	18 19.12	2.127	-	40 37 38.8	11.38	-0.02	1.0562	9.9156	9.9373	9.5689
1135	7029	5*	A	20 18 52.12	+2.390	+0.003	31 47 15.0	+11.42	-	1.0577	9.9149	9.9043	9.4771
1136	7037	6*	A	20 19 32.23	+0.290	-	68 28 49.9	+11.47	+0.022	1.0595	9.9140	9.9649	9.7260
1137	7035	6.7	C	19 47.36	1.548	-	54 16 13.9	11.49	-	1.0602	9.9136	9.9632	9.6674
1138	40 Heis. Vul.	6*	B	20 08.74	2.651	-	21 00 13.0	11.51	-	1.0611	9.9132	9.8442	9.3134
1139	7041	6.9	B	21 04.64	2.082	-	42 11 48.2	11.58	+0.03	1.0636	9.9119	9.9391	9.5887
1140	7051	8.3	C	20 21 23.36	+1.032	-	61 51 44.0	+11.60	+0.10	1.0645	9.9115	9.9656	9.7077
1141	7048	7.3	C	20 21 33.85	+2.157	-	39 59 34.6	+11.61	-	1.0649	9.9113	9.9326	9.5708
1142	7055	7.3	C	22 18.10	1.559	-	54 16 32.2	11.67	-	1.0669	9.9103	9.9608	9.6742
1143	7060	6.4	B	22 29.47	1.249	-	59 11 31.3	11.68	-	1.0674	9.9100	9.9640	9.6992
1144	7061	6*	A	22 56.42	2.222	-0.001	38 01 51.0	11.71	-0.04	1.0686	9.9094	9.9252	9.5561
1145	7062	6*	A	20 23 13.07	+1.825	+0.007	48 58 09.7	+11.73	+0.03	1.0693	9.9090	9.9526	9.6448
1146	7064	6.7*	B	20 23 22.13	+1.451	-	56 13 38.1	+11.74	+0.02	1.0697	9.9088	9.9614	9.6873
1147	7067	4.5*	A	24 17.31	2.448	+0.001	29 57 09.6	11.81	0.00	1.0721	9.9076	9.8918	9.4683
1148	7065	6*	A	24 18.84	2.871	-	10 28 43.2	11.81	+0.012	1.0722	9.9075	9.7586	9.0298
1149	XX, 171	6.7*	C	24 28	2.7	-	19 15 02.7	11.82	-	1.0726	9.9073	9.8299	9.2886
1150	7073	6*	A	20 24 34.31	+2.286	+0.001	36 02 18.9	+11.83	+0.01	1.0729	9.9072	9.8170	9.5430
1151	7076	6.8	B	20 24 39.19	+1.850	-	48 30 13.8	+11.83	-0.04	1.0731	9.9071	9.9504	9.6454
1152	7079	6.5	A	25 14.38	2.865	-	10 50 26.8	11.87	-	1.0746	9.9062	9.7617	9.0468
1153	Gr. 3208	7.0	C	25 36	0.3	-	68 54 47.9	11.90	-	1.0755	9.9057	9.9659	9.7533
1154	7083	6.7*	A	25 51.58	1.977	+0.010	45 30 17.5	11.92	+0.183	1.0762	9.9054	9.9434	9.6273
1155	XX, 185	7.5	C	20 26 08	+2.8	-	16 34 16.3	+11.91	-	1.0769	9.9050	9.8096	9.2299
1156	7085	6.5*	A	20 26 11.25	+1.856	+0.006	48 31 56.0	+11.94	+0.005	1.0770	9.9049	9.9490	9.6495
1157	7084	6.5	A	26 14.46	2.276	0.003	36 30 56.3	11.95	-0.003	1.0772	9.9048	9.9173	9.5495
1158	7086	6*	A	26 19.66	1.500	-	55 38 57.4	11.95	-	1.0774	9.9047	9.9580	9.6920
1159	7090	7.2	B	26 36.69	0.369	+0.008	68 21 03.0	11.97	-0.008	1.0781	9.9043	9.9570	9.7442
1160	7088	4*	AA	20 27 14.40	+2.865	0.000	10 52 47.1	+12.01	-0.027	1.0797	9.9034	9.7613	9.0534
1161	7091	5*	A	20 27 27.33	+1.849	-	48 47 56.4	+12.03	-0.042	1.0802	9.9031	9.9483	9.6545
1162	7098	4*	A	27 28.84	1.010	-0.008	62 34 27.5	12.03	-0.02	1.0803	9.9031	9.9590	9.7264
1163	7094	6.5*	A	28 02.27	2.833	+0.006	12 36 01.3	12.07	+0.042	1.0817	9.9023	9.7764	9.1183
1164	D.M.17 ^o , 4355	6.7	C	28 20	2.7	-	17 45 31.8	12.09	-	1.0825	9.9019	9.8173	9.2646
1165	Gr. 3215	6.7	C	20 28 27	+2.1	-	41 27 25.7	+12.10	+0.43	1.0828	9.9017	9.9310	9.6015
1166	7100	6.5	C	20 28 31.24	+2.085	-	42 45 58.9	+12.10	-	1.0829	9.9016	9.9344	9.6126
1167	7101	7.0	C	28 32.94	2.143	-	41 02 49.1	12.11	-	1.0830	9.9016	9.9298	9.5982
1168	44 ^o Heis. Vul.	6.7*	C	28 36	2.7	-	20 33 30.2	12.11	-	1.0831	9.9015	9.8364	9.3265
1169	7105	6*	C	28 43.21	1.471	-	56 21 21.5	12.12	-	1.0834	9.9013	9.9560	9.7016
1170	7103	5.6*	A	20 29 02.42	+2.331	-0.001	34 49 25.6	+12.14	-0.001	1.0842	9.9008	9.9088	9.5388

(1106) 6969. The decl. of Armagh has been rejected.

(1120) 6990. Maximum, 3m.*; minimum, 6m.*.

(1127) No. 771 = B. A. C. 7006; 2 observations by Prof. Yarnall in 1873 give 23".6.

(1130) 7017. The right ascensions do not well agree.

(1152) 7079. Middle point between two components; their difference is +1".03 in A. R. and 3".8 in declination.

(1158) 7086. A. R. relatively uncertain.

(1167) 7101. No. 369 = B. A. C. 7101. Two observations at Washington in 1873 (Transit Circle) give P. M. +0".03; declination, 49".2.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. α' .	Log. β' .	Log. ϵ' .	Log. δ' .
				<i>h. m. s.</i>			<i>° ' "</i>						
1171	Gr. 3220	6.2	C	20 29 21	+2.1	-	41 20 50.4	+12.16	-0.12	1.0850	9.9004	9.9299	9.6028
1172	7107	5.4*	B	29 27.75	2.801	-	14 14 39.9	12.17	+0.011	1.0853	9.9002	9.7897	9.1742
1173	7112	6*	C	29 49.00	1.963	-	46 15 56.5	12.19	-	1.0862	9.8997	9.9413	9.6429
1174	7114	6.7*	C	30 05.60	2.160	-	40 40 06.0	12.21	-	1.0868	9.8993	9.9274	9.5987
1175	R. C. 4871	7.2*	C	20 30 28	+2.1	-	41 17 16.0	+12.24	-	1.0878	9.8988	9.9289	9.6050
1176	7117	6.7*	A	20 30 46.90	+2.568	+0.003	25 27 00.4	+12.26	0.00	1.0885	9.8983	9.8644	9.4196
1177	7119	6.7*	C	30 50.52	2.137	-	41 27 30.7	12.27	-	1.0887	9.8992	9.9229	9.6074
1178	7120	6.7*	C	31 11.91	1.747	-	51 25 25.2	12.29	-	1.0895	9.8977	9.9485	9.6805
1179	7121	3.4*	A	31 41.16	2.805	0.007	14 09 41.7	12.32	-0.030	1.0907	9.8970	9.7880	9.1771
1180	7126	6*	A	20 31 44.69	+2.556	+0.001	26 01 41.0	+12.32	-0.011	1.0909	9.8969	9.8669	9.4310
1181	7125	6.5*	A	20 31 50.30	+2.868	-	10 56 33.7	+12.33	-0.022	1.0911	9.8968	9.7602	9.0673
1182	IC8 II. Cyg.	6*	C	32 41	2.33	-	37 53 41.5	12.39	-	1.0932	9.8955	9.9166	9.5793
1183	7131	6.2	A	32 26.83	2.436	-0.004	31 08 12.6	12.38	-0.05	1.0926	9.8959	9.8911	9.5040
1184	7132	6.4	A	32 28.07	2.437	-0.004	31 05 14.4	12.38	0.023	1.0926	9.8958	9.8909	9.5034
1185	7137	6*	B	20 32 49.99	+2.831	-	12 52 39.2	+12.40	-0.008	1.0935	9.8953	9.7768	9.1394
1186	7140	5*	A	20 32 56.33	+2.673	+0.004	20 45 49.1	+12.41	0.00	1.0938	9.8951	9.8352	9.3412
1187	7143	5.6	C	33 05.21	2.611	+0.002	23 40 43.2	12.42	-0.012	1.0941	9.8949	9.8529	9.3958
1188	7146	6.0	A	33 17.05	2.782	-	15 24 01.5	12.43	-	1.0946	9.8946	9.7970	9.2166
1189	Gr. 3243	7.2	C	33 33	2.1	-	42 24 08.3	12.45	-	1.0952	9.8942	9.9289	9.6219
1190	7153	6.5	C	20 33 39.60	+1.704	-	52 32 14.2	+12.46	-	1.0955	9.8941	9.9474	9.6930
1191	7149	4.3*	AA	20 33 49.90	+2.781	+0.007	15 28 20.5	+12.47	-0.001	1.0959	9.8938	9.7973	9.2199
1192	7152	6.5	A	33 50.83	2.469	-	29 53 51.5	12.47	-0.06	1.0959	9.8938	9.8845	9.4914
1193	7150	6.8	B	33 52.32	2.872	-	10 48 22.8	12.47	+0.08	1.0960	9.8937	9.7582	9.0668
1194	7157	7.3	A	34 45.88	2.788	-	15 11 59.1	12.53	-	1.0981	9.8924	9.7947	9.2146
1195	7158	6*	C	20 34 58.80	+2.192	-	40 08 18.6	+12.55	-	1.0986	9.8921	9.9214	9.6058
1196	7161	6*	B	20 35 10.36	+2.021	-	45 13 33.0	+12.56	0.00	1.0991	9.8918	9.9340	9.6481
1197	7160	6.0	A	35 25.08	2.809	+0.001	14 08 22.1	12.58	+0.002	1.0997	9.8914	9.7860	9.1854
1198	XX, 270	7.0	C	35 44	2.8	-	13 21 53.1	12.60	-	1.1004	9.8909	9.7796	9.1631
1199	7166	6.5	C	35 46.18	1.554	-	55 33 54.6	12.60	-	1.1005	9.8909	9.9478	9.7147
1200	7164	6.5*	A	20 35 59.03	+2.425	+0.003	31 51 49.0	+12.62	-0.02	1.1010	9.8905	9.8914	9.5214
1201	7167	6.5	C	20 36 19.71	+2.242	-	38 38 16.5	+12.64	-	1.1018	9.8900	9.9157	9.5951
1202	7171	2.1*	AA	37 10.26	2.042	+0.001	44 50 04.4	12.70	+0.003	1.1038	9.8887	9.9311	9.6498
1203	7174	6.5	C	37 25.48	2.164	-	41 16 12.2	12.72	-	1.1048	9.8883	9.9223	9.6215
1204	XX, 283	6*	B	37 28.51	2.347	-	35 00 33.4	12.72	-	1.1045	9.8882	9.9025	9.5610
1205	7173	4*	A	20 37 37.35	+2.802	-0.001	14 37 38.7	+12.73	-0.039	1.1048	9.8880	9.7888	9.2050
1206	7176	6*	A	20 37 38.49	+1.278	-	60 03 13.0	+12.73	-0.016	1.1048	9.8880	9.9475	9.7404
1207	7182	5.6*	A	38 21.42	1.848	+0.006	49 53 30.3	12.78	-0.01	1.1065	9.8868	9.9390	9.6879
1208	7189	7.0	C	39 10.49	1.493	-	56 56 11.1	12.83	-	1.1084	9.8856	9.9448	9.7295
1209	7188	5.6*	A	39 27.95	2.596	-0.002	24 49 27.4	12.85	-0.18	1.1090	9.8851	9.8549	9.4299
1210	7193	6*	B	20 39 59.58	+1.286	-	60 09 05.7	+12.89	0.00	1.1102	9.8843	9.9447	9.7463
1211	7198	6*	B	20 40 28.52	+1.981	-	46 50 38.6	+12.92	-	1.1113	9.8835	9.9318	9.6723
1212	7194	4.5*	A	40 30.09	2.475	-	30 15 51.6	12.92	+0.04	1.1113	9.8835	9.8809	9.5116
1213	7199	5	A	40 50.75	2.785	-0.002	15 40 31.1	12.95	-0.182	1.1121	9.8829	9.7952	9.2416
1214	7200	4*	A	40 51.57	2.785	-0.002	15 40 30.3	12.95	-0.182	1.1122	9.8829	9.7952	9.2417
1215	7204	3.2*	AA	20 41 09.24	+2.396	+0.031	33 30 11.0	+12.97	+0.327	1.1128	9.8824	9.8936	9.5527
1216	7211	6.5*	B	20 41 36.97	+0.761	+0.001	66 12 11.5	+13.00	+0.02	1.1139	9.8817	9.9404	9.7731
1217	T. Cygni.	Var.	B	42 11.37	2.388	-	33 54 57.0	13.04	-	1.1151	9.8807	9.8943	9.5596
1218	7215	5*	A	42 14.83	1.499	-0.011	57 07 53.8	13.04	-0.245	1.1152	9.8822	9.9413	9.7374
1219	XX, 319	7.1	C	42 25	2.6	-	25 43 07.9	13.05	-	1.1156	9.8804	9.8576	9.4509
1220	7213	5.4*	AA	20 42 32.39	+2.343	-	36 01 56.0	+13.06	+0.002	1.1159	9.8806	9.9019	9.5833
1221	7218	6.7*	B	20 42 43.70	+1.748	-0.008	52 32 26.1	+13.07	-0.16	1.1163	9.8799	9.9374	9.7139
1222	7220	4.3*	A	42 44.66	1.215	+0.017	61 21 13.1	13.07	+0.815	1.1164	9.8798	9.9412	9.7575
1223	7219	7.0	C	43 03.48	2.054	-	45 07 17.5	13.09	-	1.1170	9.8793	9.9258	9.6653
1224	7223	6*	B	43 40.19	2.855	-	12 04 44.0	13.13	+0.103	1.1184	9.8783	9.7652	9.1369
1225	A. Ö. 21126	6.7*	B	20 43 42.46	+1.974	-	47 22 18.5	+13.14	0.00	1.1185	9.8783	9.9293	9.6831
1226	7233	6.5*	A	20 44 40.81	+2.042	+0.001	45 39 03.7	+13.20	-0.016	1.1206	9.8767	9.9251	9.6728
1227	7241	6.5*	B	45 38.55	2.117	+0.012	43 35 20.7	13.26	+0.115	1.1227	9.8750	9.9198	9.6590
1228	7243	7.3	B	45 40.17	1.863	-	50 19 08.5	13.27	-	1.1227	9.8750	9.9315	9.7068
1229	XX, 358	6*	C	46 10	2.5	-	27 46 58.6	13.30	-0.03	1.1238	9.8742	9.8650	9.4901
1230	7246	5*	A	20 46 46.67	+2.571	-0.005	26 37 47.7	+13.34	-0.072	1.1251	9.8732	9.8589	9.4744
1231	F. 3606	6*	C	20 47 06	+1.1	-	63 34 34.3	+13.36	-	1.1258	9.8726	9.9350	9.7757
1232	Gr. 3311	6.8	C	47 20	1.8	-	51 55 37.0	13.37	-	1.1262	9.8722	9.9315	9.7201
1233	7253	5.6*	A	48 49.53	2.118	+0.001	43 54 53.0	13.47	+0.007	1.1294	9.8697	9.9172	9.6683
1234	7254	6*	B	48 56.52	2.091	-	44 42 32.7	13.48	-	1.1296	9.8695	9.9187	9.6748
1235	7256	5.6*	AA	20 49 13.97	+2.555	+0.001	27 34 59.6	+13.50	0.00	1.1303	9.8690	9.8615	9.4937

(1183) 7131. No. 807 = B. A. C. 7132. It would probably be better to use P. M. - 0".05 and declination 14".0. Combined magnitude, 5*.

(1217) Maximum magnitude, 5*; minimum, 6*.

(1227) No. 839 = B. A. C. 7241. Two observations at Washington (1873) give 20".9.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. <i>a'</i> .	Log. <i>b'</i> .	Log. <i>c'</i> .	Log. <i>d'</i> .
				<i>h. m. s.</i>			<i>° ' "</i>						
1236	Gr. 3328	7.0	C	20 49 25	+1.5	-	58 11 00.4	+13.51	-	1.1306	9.8686	9.9328	9.7578
1237	7259	7.5	B	49 28.02	2.120	+0.002	43 54 45.1	13.51	+0.013	1.1307	9.8686	9.9165	9.6697
1238	7257	6.5*	A	49 40.76	2.860	0.006	12 05 30.1	13.53	+0.012	1.1312	9.8682	9.7626	9.1502
1239	7258	6.5*	A	49 41.63	2.839	+0.002	13 14 44.8	13.53	-0.004	1.1312	9.8682	9.7720	9.1891
1240	7260	6.8	B	20 49 42.16	+2.236	-	40 13 40.8	+13.53	-	1.1312	9.8682	9.9074	9.6392
1241	7262	6.5	A	20 49 44.01	+1.711	-	54 02 17.5	+13.53	+0.17	1.1313	9.8681	9.9305	9.7373
1242	Gr. 3327	6.7*	C	49 50	1.9	-	49 03 33.4	13.54	-	1.1315	9.8679	9.9251	9.7075
1243	XX, 400	6.6	B	50 40.15	1.446	-	58 50 00.7	13.59	-	1.1332	9.8665	9.9313	9.7634
1244	XX, 401	6.7	B	51 32.64	2.128	-	43 53 42.6	13.65	-	1.1350	9.8650	9.9143	9.6738
1245	7268	6.7*	A	20 51 36.55	+2.023	-	46 56 21.3	+13.65	0.00	1.1352	9.8648	9.9198	9.6967
1246	7273	6.7	B	20 52 10.25	+2.113	-	44 26 41.4	+13.69	-	1.1363	9.8638	9.9146	9.6794
1247	7274	6.7*	B	52 20.54	1.959	-	48 42 56.3	13.70	-0.093	1.1366	9.8636	9.9218	9.7103
1248	7271	6.5*	A	52 24.69	2.893	-0.004	10 21 28.6	13.70	0.058	1.1368	9.8634	9.7467	9.0894
1249	7278	6.4	C	52 27.70	1.898	+0.010	50 14 57.4	13.70	-	1.1369	9.8633	9.9236	9.7205
1250	7277	6*	A	20 52 30.84	+2.232	+0.003	40 41 12.4	+13.71	-0.003	1.1370	9.8632	9.9057	9.6490
1251	7275	6.5*	A	20 52 41.07	+2.680	-	21 50 37.0	+13.72	-0.008	1.1373	9.8629	9.8287	9.4058
1252	7281	6.0	B	52 56.54	1.606	+0.003	56 24 24.5	13.73	-0.02	1.1378	9.8625	9.9279	9.7563
1253	7290	6.5*	A	53 51.00	2.135	-	43 59 06.6	13.79	-	1.1397	9.8608	9.9118	9.6792
1254	30 Heis. Del.	6*	C	54 02	2.8	-	16 20 21.6	13.80	-	1.1400	9.8605	9.7927	9.2871
1255	R. C. 5050	7.8	C	20 54 16	+2.1	-	43 55 50.3	+13.82	-	1.1405	9.8601	9.9112	9.6796
1256	7294	6.5*	A	20 54 19.70	+1.919	-	49 58 37.6	+13.84	-	1.1410	9.8597	9.9208	9.7229
1257	31 Heis. Del.	6*	C	54 45	2.7	-	18 50 42.3	13.85	-	1.1415	9.8592	9.8090	9.3431
1258	7297	6.8	A	55 08.68	2.268	+0.020	39 45 52.7	13.88	+0.20	1.1423	9.8585	9.9005	9.6460
1259	7301	6.5*	A	55 34 46	2.037	-0.005	47 02 01.0	13.90	-0.018	1.1431	9.8577	9.9154	9.7033
1260	7310	6*	A	20 56 20.42	+1.482	-	58 57 02.3	+13.95	-0.03	1.1446	9.8563	9.9239	9.7753
1261	7306	5.6*	A	20 56 49.02	+2.090	-0.002	45 39 56.0	+13.98	0.00	1.1455	9.8554	9.9117	9.6978
1262	7313	6.4	A	57 33.34	2.297	-	39 01 00.7	14.03	-	1.1470	9.8541	9.8959	9.6438
1263	7317	6.8	B	57 56.21	2.140	-	44 17 53.7	14.05	-0.04	1.1477	9.8534	9.9078	9.6496
1264	XX, 453	7.0	C	58 10	2.6	-	28 35 54.5	14.07	-	1.1481	9.8529	9.8586	9.5260
1265	7320	6.7*	B	20 58 13.82	+2.323	+0.001	38 09 51.0	+14.07	+0.03	1.1483	9.8528	9.8929	9.6370
1266	7326	6.7*	B	20 59 11.31	+2.242	-	41 08 04.9	+14.13	-0.04	1.1501	9.8510	9.8996	9.6661
1267	7332	6*	C	20 59 58.39	1.826	-	52 47 19.2	14.18	-	1.1516	9.8495	9.9168	9.7506
1268	Gr. 3387	6.9	C	21 0 16	1.7	-	54 44 01.8	14.20	-	1.1522	9.8490	9.9176	9.7619
1269	7333	4*	A	0 23.06	2.176	+0.002	43 25 47.7	14.20	-0.003	1.1524	9.8487	9.9032	9.6875
1270	7336	5.0	AA	21 1 17.67	+2.332	+0.351	38 08 08.8	+14.26	+3.231	1.1541	9.8470	9.8896	9.6426
1271	7337	5.3	A	21 1 19.19	+2.332	+0.355	38 08 00.3	+14.26	+3.04	1.1541	9.8470	9.8895	9.6426
1272	F. 3689	7.0	A	1 33.53	1.461	-	59 45 32.0	14.28	-	1.1546	9.8465	9.9166	9.7889
1273	7345	5.6*	A	2 17.78	2.062	-0.001	47 08 48.3	14.32	-0.01	1.1559	9.8451	9.9076	9.7190
1274	XXI, 1	6*	A	3 20.73	2.540	-	29 42 04.5	14.38	-0.04	1.1579	9.8431	9.8586	9.5508
1275	7354	7.5	A	21 4 53.11	+2.698	-	21 56 56.5	+14.48	0.00	1.1607	9.8400	9.8202	9.4312
1276	7356	6.5	A	21 4 54.21	+2.698	-	21 56 47.4	+14.48	0.00	1.1607	9.8400	9.8202	9.4312
1277	5132	7.0	C	6 11	2.1	-	47 10 56.6	14.56	-	1.1630	9.8375	9.9028	9.7263
1278	7361	7.9	B	6 18.67	2.689	-	22 34 14.4	14.57	-0.04	1.1633	9.8372	9.8225	9.4453
1279	7365	6*	A	6 23.67	1.850	-	53 03 11.7	14.57	-0.025	1.1634	9.8370	9.9084	9.7639
1280	Gr. 3410	6.7*	C	21 6 48	+1.3	-	62 47 09.6	+14.59	-	1.1642	9.8362	9.9076	9.8110
1281	7368	3*	AA	21 7 37.02	+2.550	+0.002	29 42 54.4	+14.64	-0.07	1.1656	9.8346	9.8546	9.5587
1282	7373	6.7*	B	8 25.01	2.407	-	36 07 05.5	14.69	-	1.1670	9.8329	9.8760	9.6353
1283	7377	6*	A	8 37.23	1.530	0.000	59 28 22.7	14.70	-0.017	1.1674	9.8325	9.9064	9.8004
1284	7383	7.0	B	9 31.07	2.294	-	40 37 44.7	14.76	+0.05	1.1689	9.8307	9.8866	9.6805
1285	7387	7.5	A	21 9 36.29	+1.530	-	59 34 56.3	+14.76	-0.04	1.1691	9.8305	9.9050	9.8026
1286	7385	4*	A	21 9 48.12	+2.377	+0.018	37 30 45.9	+14.77	+0.447	1.1694	9.8301	9.8785	9.6515
1287	7398	4.5*	A	12 30.37	2.351	-	38 52 17.6	14.93	-0.02	1.1741	9.8244	9.8789	9.9696
1288	LL, 41419	6.5	C	12 39	2.4	-	38 41 19.5	14.94	-	1.1744	9.8241	9.8783	9.6681
1289	Gr. 3424	6*	C	12 39	2.3	-	42 09 37.9	14.94	-	1.1744	9.8241	9.8861	9.6990
1290	7399	4.5*	B	21 12 46.74	+2.462	+0.003	34 22 22.7	+14.95	-0.003	1.1746	9.8239	9.8660	9.6241
1291	XXI, 71	6.3	C	21 12 49	+2.9	-	19 40 39.8	+14.95	-	1.1746	9.8238	9.7403	9.1403
1292	XXI, 77	6.8	C	13 22	2.8	-	17 17 58.8	14.98	-	1.1756	9.8226	9.7867	9.3467
1293	7402	5*	B	13 47.38	2.230	-0.002	43 25 14.1	15.01	-0.015	1.1763	9.8217	9.8871	9.7113
1294	7401	6.0	B	13 30.00	1.790	-	55 16 24.5	14.99	-	1.1758	9.8223	9.8993	9.7884
1295	7411	6.5*	B	21 15 10.60	+2.059	-	48 58 56.4	+15.09	-	1.1786	9.8187	9.8931	9.7511
1296	7410	6*	A	21 15 25.30	+2.692	+0.009	23 19 49.1	+15.10	-0.15	1.1790	9.8182	9.8189	9.4746
1297	7416	3.2*	AA	15 35.68	1.414	+0.023	62 03 22.6	15.11	+0.031	1.1793	9.8178	9.8944	9.8233
1298	7417	6*	B	15 48.09	1.661	-	58 05 43.1	15.12	-	1.1796	9.8174	9.8959	9.8063
1299	7418	4.5*	AA	16 18.34	2.765	+0.009	19 16 14.3	15.15	+0.067	1.1804	9.8163	9.7964	9.3968
1300	7428	5.6*	B	21 16 46.40	+1.253	-	64 20 32.6	+15.18	-0.004	1.1812	9.8153	9.8904	9.8340

(1245) 7268. B. A. C. 42 seconds in error in A. R.

(1271) 7337. The declination derived from the preceding component with Auwers's difference (derived from micrometer observations) is $38^{\circ} 8' 0''.2$.(1286) 7385. I have assumed an error of $1''$ in Von Asten's declination.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. <i>a'</i> .	Log. <i>b'</i> .	Log. <i>c'</i> .	Log. <i>d'</i> .
				<i>h. m. s.</i>			<i>° ' "</i>						
1301	7430	6*	A	21 17 20.99	+1.548	- . . .	60 13 33.7	+15.21	0.00	1.1822	9.8140	9.8927	9.8185
1302	7431	6*	B	17 39.82	2.074	- . . .	48 51 14.6	15.23	+0.07	1.1827	9.8133	9.8895	9.7573
1303	3447	7.0	C	18 00	2.1	- . . .	48 57 27.9	15.26	- . . .	1.1834	9.8122	9.8890	9.7588
1304	7437	6*	A	18 20.89	2.690	+0.010	23 44 16.9	15.26	0.00	1.1838	9.8118	9.8183	9.4864
1305	XXI, 133	7.3	C	21 19 00	+1.3	- . . .	63 49 48.5	+15.30	- . . .	1.1848	9.8103	9.8872	9.8357
1306	7444	6*	A	21 19 00.96	+2.656	- . . .	25 38 15.9	+15.30	- . . .	1.1848	9.8103	9.8265	9.5189
1307	7448	6.7	B	19 46.79	2.003	- . . .	51 07 12.3	15.35	-0.03	1.1861	9.8086	9.8886	9.7751
1308	7449	7.7	A	19 48.15	1.331	+0.014	63 41 25.0	15.35	+0.064	1.1861	9.8085	9.8860	9.8364
1309	7450	6.7*	B	20 38.10	2.779	- . . .	18 50 06.0	15.40	- . . .	1.1874	9.8066	9.7906	9.3943
1310	7453	6*	A	21 20 40.54	+2.446	-0.001	36 07 41.1	+15.40	-0.017	1.1875	9.8065	9.8622	9.6559
1311	7455	6*	A	21 20 44.20	+2.179	+0.015	46 10 24.3	+15.40	+0.032	1.1876	9.8064	9.8822	9.7436
1312	7461	6.5*	A	22 09.61	2.637	+0.006	27 03 54.5	15.48	+0.021	1.1898	9.8032	9.8297	9.5457
1313	7462	5*	A	22 15.56	2.440	- . . .	36 34 27.5	15.49	- . . .	1.1900	9.8029	9.8615	9.6630
1314	7468	6*	B	22 37.63	1.972	- . . .	52 21 22.0	15.51	- . . .	1.1905	9.8021	9.8848	9.7870
1315	7465	6*	B	21 22 47.57	+2.548	- . . .	31 40 42.6	+15.52	+0.03	1.1908	9.8017	9.8463	9.6089
1316	7469	7.6	C	21 22 55.38	+2.199	+0.005	45 52 23.1	+15.52	- . . .	1.1910	9.8014	9.8792	9.7448
1317	s* Heis. Peg.	6*	C	23 17	2.7	- . . .	21 38 03.8	15.54	- . . .	1.1916	9.8005	9.8036	9.4560
1318	XXI, 159	7.1	C	23 19	2.2	- . . .	46 01 03.1	15.55	- . . .	1.1916	9.8005	9.8784	9.7465
1319	7476	6.7*	B	23 58.24	1.659	- . . .	59 12 24.4	15.58	0.00	1.1926	9.7988	9.8823	9.8245
1320	7474	5.4*	A	21 24 17.14	+2.713	+0.004	23 05 30.6	+15.60	0.00	1.1931	9.7982	9.8099	9.4845
1321	7477	7.0	C	21 24 30.75	+2.267	- . . .	43 47 30.7	+15.61	- . . .	1.1935	9.7976	9.8736	9.7315
1322	7480	5*	A	24 50.17	2.204	+0.003	45 59 24.0	15.63	+0.106	1.1939	9.7969	9.8762	9.7486
1323	R. C. 5252	6.7	C	25 00	2.2	- . . .	45 52 44.3	15.64	- . . .	1.1942	9.7965	9.8760	9.7481
1324	11 Heis. Peg.	6*	B	25 06.78	2.900	- . . .	11 35 22.0	15.64	- . . .	1.1944	9.7963	9.7409	9.1952
1325	7482	6.5*	A	21 25 21.06	+1.172	-0.003	66 15 50.4	+15.66	-0.028	1.1949	9.7955	9.8729	9.8543
1326	7483	6*	C	21 26 10.57	+1.991	- . . .	52 24 30.3	+15.70	- . . .	1.1960	9.7937	9.8794	9.7928
1327	7493	3*	AA	27 02.32	0.796	+0.002	70 00 43.5	15.75	-0.018	1.1973	9.7917	9.8633	9.8681
1328	7488	6.8	B	27 01.01	2.026	- . . .	51 38 35.2	15.75	+0.07	1.1973	9.7916	9.8777	9.7896
1329	7489	6*	C	27 15.36	2.011	- . . .	52 04 08.3	15.76	- . . .	1.1976	9.7911	9.8776	9.7924
1330	7494	6.8	B	21 27 25.70	+1.704	+0.019	58 51 57.4	+15.77	+0.04	1.1978	9.7907	9.8774	9.8281
1331	7495	6.5*	B	21 27 33.24	+1.647	- . . .	59 54 31.3	+15.78	- . . .	1.1980	9.7904	9.8760	9.8230
1332	7496	6.5	A	27 46.57	2.159	- . . .	47 53 32.3	15.79	- . . .	1.1984	9.7899	9.8741	9.7666
1333	7501	6.5	A	28 36.97	2.242	- . . .	45 18 00.4	15.84	- . . .	1.1996	9.7878	9.8700	9.7492
1334	XXI, 195	6.7*	C	28 51	2.7	- . . .	22 12 26.0	15.85	-0.06	1.1999	9.7873	9.8016	9.4751
1335	7503	4*	B	21 29 16.80	+2.253	-0.003	45 02 23.3	+15.87	-0.096	1.2006	9.7862	9.8682	9.7482
1336	7505	5.6*	A	21 29 40.26	+2.435	+0.012	37 58 27.8	+15.89	+0.096	1.2011	9.7853	9.8557	9.6881
1337	7512	6.7*	C	30 08.89	2.062	- . . .	51 08 31.5	15.92	- . . .	1.2018	9.7841	9.8727	9.7910
1338	Gr. 3516	6.7	C	31 51	1.2	- . . .	66 10 12.0	16.01	- . . .	1.2043	9.7798	9.8611	9.8634
1339	7520	6.5*	A	31 54.50	2.798	+0.011	18 45 25.4	16.01	+0.020	1.2044	9.7797	9.7814	9.4095
1340	7521	5*	A	21 31 56.33	+2.399	+0.001	39 51 09.6	+16.01	+0.010	1.2044	9.7795	9.8566	9.7090
1341	Gr. 3517	6.7	C	21 32 04	+1.2	- . . .	66 12 54.1	+16.02	- . . .	1.2046	9.7793	9.8606	9.8639
1342	7524	6.7*	A	32 44.23	2.428	- . . .	38 45 19.2	16.05	- . . .	1.2056	9.7776	9.8534	9.7000
1343	D.M.50°, 33-2	7.1	C	32 54	2.1	- . . .	50 30 09.6	16.06	- . . .	1.2058	9.7772	9.8680	9.7910
1344	7528	6*	B	33 11.51	2.786	- . . .	19 42 08.0	16.08	- . . .	1.2062	9.7765	9.7853	9.4318
1345	7530	6.5	C	21 33 29	+2.0	- . . .	53 28 46.4	+16.09	- . . .	1.2066	9.7757	9.8679	9.8095
1346	7533	7.6	A	21 33 50.93	+1.591	+0.008	61 44 16.8	+16.11	+0.12	1.2071	9.7748	9.8632	9.8498
1347	Gr. 3524	6.7	C	34 00	2.1	- . . .	49 13 56.0	16.12	- . . .	1.2073	9.7744	9.8656	9.7845
1348	7542	5.6*	A	34 33.99	1.610	- . . .	61 31 06.8	16.16	-0.01	1.2081	9.7729	9.8621	9.8500
1349	Gr. 3533	7.3	C	34 59	2.1	- . . .	51 47 50.0	16.17	- . . .	1.2087	9.7719	9.8652	9.8018
1350	7545	6*	A	21 35 04.95	+1.859	+0.002	56 55 26.9	16.17	-0.013	1.2088	9.7716	9.8645	9.8299
1351	7544	6.5*	A	21 35 16.80	+2.343	+0.005	42 42 25.0	16.19	+0.007	1.2091	9.7711	9.8569	9.7384
1352	7548	7.0	C	35 40.55	2.162	- . . .	49 06 58.7	16.21	- . . .	1.2097	9.7701	9.8629	9.7860
1353	7553	6*	A	36 26.53	2.929	- . . .	10 15 19.0	16.25	- . . .	1.2107	9.7681	9.7254	9.1591
1354	7554	6.3	B	36 32.64	2.408	+0.001	40 14 18.0	16.25	-0.04	1.2109	9.7678	9.8510	9.7189
1355	7555	6.0	C	21 36 34.85	+1.981	- . . .	54 18 15.4	+16.25	- . . .	1.2110	9.7676	9.8626	9.8184
1356	Gr. 3550	6.9	B	21 36 50.86	+1.760	- . . .	59 11 02.1	+16.27	- . . .	1.2113	9.7670	9.8600	9.8430
1357	7559	5.9	B	37 21.19	2.405	+0.001	40 30 25.4	16.29	-0.003	1.2120	9.7657	9.8504	9.7224
1358	Gr. 3549	7.6	C	37 31	2.4	- . . .	40 28 38.4	16.30	- . . .	1.2122	9.7652	9.8501	9.7224
1359	7560	5.4*	A	37 39.45	2.123	-0.001	50 37 11.0	16.31	-0.013	1.2124	9.7618	9.8603	9.7984
1360	Gr. 3554	7.1	B	21 37 43.89	+2.084	- . . .	51 43 17.3	+16.31	- . . .	1.2125	9.7647	9.8606	9.8052
1361	Gr. 3556	6.7*	C	21 38 06	+2.2	- . . .	49 01 47.1	+16.33	- . . .	1.2130	9.7637	9.8590	9.7888
1362	7565	6.5*	B	38 05.11	2.466	- . . .	40 35 03.6	16.33	+0.02	1.2130	9.7637	9.8495	9.7231
1363	7566	6.5*	A	38 15.39	2.472	+0.001	37 42 43.5	16.34	0.00	1.2132	9.7633	9.8438	9.6976
1364	Rii. 9430	7.2	B	38 26.61	2.472	- . . .	37 44 01.2	16.35	- . . .	1.2135	9.7628	9.8437	9.6982
1365	22 Heis. Peg.	6.5*	C	21 38 30	+2.9	- . . .	14 12 11.8	+16.35	- . . .	1.2135	9.7626	9.7502	9.3012

(1319) 7476. The A. R. is very uncertain; the declinations do not well agree.

(1355) No. 425 = B. A. C. 7555. A P. M. of -0".03 is indicated by two observations made at Washington in 1873. The declination becomes 14".6.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a' .	Log. b' .	Log. c' .	Log. d' .
				<i>h. m. s.</i>			<i>° ' "</i>						
1366	7568	{ 4.5* }	A	21 38 33.09	+2.657	+0.019	23 10 43.3	+16.36	-0.286	1.2136	9.7625	9.8168	9.5856
1367	7569		A	38 33.45	2.657	0.019	23 10 41.0	16.36	-0.268	1.2136	9.7625	9.8167	9.5856
1368	7567		B	38 35.56	2.838	+0.003	16 46 39.5	16.36	+0.002	1.2136	9.7624	9.7653	9.3719
1369	7570		B	38 46.53	2.656		28 12 36.8	16.36	-0.08	1.2139	9.7619	9.8166	9.5863
1370	7571	4*	A	21 38 59.01	+2.710	-0.002	25 04 16.5	+16.37	+0.01	1.2142	9.7613	9.8045	9.5391
1371	7582	4* to 5*	B	21 39 40.89	+1.832		58 12 26.4	+16.41		1.2151	9.7594	9.8556	9.8423
1372	7584	7.0	A	40 16.53	2.714		25 00 29.2	16.44		1.2159	9.7579	9.8030	9.5398
1373	7585	5.6*	A	40 19.32	2.756	+0.004	22 22 24.1	16.44	-0.008	1.2160	9.7577	9.7918	9.4943
1374	7586	6.8*	B	40 42.52	2.715	+0.013	24 59 07.0	16.46	+0.023	1.2165	9.7567	9.8024	9.5400
1375	7589	7.1	C	21 40 48.30	+2.105		51 41 32.5	+16.47		1.2166	9.7562	9.8553	9.8091
1376	7590	6.0	A	21 41 08.00	+2.844	+0.007	16 37 02.1	+16.48	-0.03	1.2170	9.7555	9.7625	9.3711
1377	7593	6.5	C	41 18.70	2.375		42 29 01.3	16.49		1.2172	9.7550	9.8477	9.7446
1378	5390	6.7*	C	41 27	1.6		61 53 06.4	16.50		1.2174	9.7546	9.8487	9.8607
1379	7595	5*	A	41 50.59	1.729	0.005	60 32 39.8	16.52	-0.005	1.2180	9.7536	9.8495	9.8557
1380	7598	4.5*	A	21 42 10.55	+2.209	+0.001	48 43 54.3	+16.53	-0.015	1.2184	9.7526	9.8521	9.7922
1381	7602	7.7	A	21 43 08.13	+2.476		38 22 34.9	+16.58		1.2195	9.7500	9.8334	9.7103
1382	194 Heis. Cyg.	6*	C	43 18	2.5		38 04 05.8	16.59		1.2198	9.7495	9.8376	9.7077
1383	7605	6*	B	43 44.05	1.768	-0.001	60 06 46.5	16.61	-0.017	1.2204	9.7483	9.8463	9.8563
1384	A. Ö. 22896	7.0	C	43 52	1.8		59 07 13.4	16.62		1.2208	9.7480	9.8470	9.8521
1385	7606	6.5*	A	21 44 11.82	+2.847	+0.007	16 42 18.9	+16.63	-0.071	1.2210	9.7470	9.7605	9.3774
1386	7607	5*	A	21 44 18.88	+2.647		29 35 34.8	+16.64	-0.023	1.2211	9.7467	9.8148	9.6126
1387	R. C. 5408	6*	C	44 35	2.4		40 33 59.8	16.65		1.2215	9.7459	9.8400	9.7325
1388	7610	6.7*	A	44 48.55	1.075		69 34 16.5	16.66	-0.005	1.2218	9.7453	9.8278	9.8914
1389	7611	6.5	A	45 06.08	1.509		64 35 19.8	16.68		1.2221	9.7445	9.8374	9.8758
1390	7612	6.7	C	21 45 36.50	+2.120		52 06 50.8	+16.70		1.2228	9.7430	9.8471	9.8178
1391	7615	6.7*	C	21 45 39.54	+1.754	+0.002	60 41 26.5	+16.71	-0.034	1.2229	9.7428	9.8418	9.8612
1392	XXI, 312	6*	C	45 42	2.8		19 14 29.3	16.71	+0.03	1.2229	9.7428	9.7723	9.4386
1393	7614	6.5	B	45 54.75	2.474		38 57 07.3	16.72		1.2232	9.7421	9.8354	9.7194
1394	7621	6.7*	C	46 14.35	1.399		66 12 40.9	16.73	-0.006	1.2236	9.7412	9.8320	9.8828
1395	Gr. 3594	7.5	C	21 46 35	+1.5		64 38 58.2	+16.75		1.2240	9.7402	9.8336	9.8779
1396	7623	6*	B	21 46 55.12	+2.678	-0.003	23 12 33.7	+16.76	-0.063	1.2244	9.7392	9.8073	9.5968
1397	7627	5.6*	AA	47 22.49	2.725	+0.001	25 20 15.9	16.79	-0.004	1.2250	9.7379	9.7967	9.5542
1398	36 Heis. Pegasi	6.5*	C	47 44	2.8		19 04 47.2	16.80		1.2254	9.7369	9.7697	9.4376
1399	7631	6*	B	47 47.40	2.023		55 12 34.8	16.82		1.2255	9.7367	9.8423	9.8376
1400	Gr. 3601	7.0	C	21 48 13	+2.120		54 27 08.1	+16.83		1.2260	9.7355	9.8418	9.8343
1401	Gr. 3608	6.7*	C	21 48 30	+1.5		65 09 58.8	+16.84		1.2264	9.7347	9.8292	9.8821
1402	7636	7.2	B	48 54.35	2.013		55 37 25.5	16.86		1.2269	9.7335	9.8400	9.8413
1403	7637	6.5	A	48 57.02	2.097	-0.001	53 24 31.1	16.86	-0.003	1.2269	9.7333	9.8408	9.8284
1404	Gr. 3609	6.7*	C	49 02	1.7		62 07 25.4	16.87		1.2270	9.7331	9.8331	9.8713
1405	7642	7.2	A	21 50 33.19	+2.110	+0.021	53 20 27.7	+16.94	+0.052	1.2288	9.7286	9.8379	9.8310
1406	7643	6*	A	21 50 41.12	+2.010		56 01 10.6	+16.94	-0.03	1.2290	9.7282	9.8363	9.8455
1407	7641	6.5*	A	50 50.71	2.926	+0.001	11 29 01.3	16.95	-0.009	1.2292	9.7277	9.7256	9.2261
1408	7646	6.5	C	51 06.92	2.137		52 39 02.9	16.96		1.2295	9.7269	9.8370	9.8277
1409	7651	6.5	A	51 36.13	1.792		60 56 57.2	16.99	0.00	1.2301	9.7254	9.8294	9.6896
1410	R. C. 5476	6.9	C	21 52 11	+2.3		45 59 52.6	+17.01		1.2308	9.7236	9.8339	9.7855
1411	R. C. 5483	7.0	C	21 52 30	+1.9		59 12 04.4	+17.03		1.2312	9.7227	9.8298	9.8630
1412	Ril. 9704	8.7	C	52 53	2.9		11 35 50.3	17.05		1.2316	9.7215	9.7250	9.2327
1413	7658	6.5*	A	53 07.72	1.690		63 01 50.3	17.06	-0.02	1.2319	9.7208	9.8230	9.8798
1414	Arg. 224	7.4	B	53 08.95	2.678	-0.029	29 13 45.7	17.06	0.407	1.2319	9.7207	9.8030	9.6181
1415	7664	6*	A	21 54 59.99	+2.917	+0.006	12 31 18.8	+17.14	-0.059	1.2341	9.7150	9.7292	9.2680
1416	7668	1.7	B	21 55 12.02	+2.003	+0.010	57 03 37.5	+17.15	-0.03	1.2343	9.7144	9.8266	9.8560
1417	XXI, 369	7.8	C	55 29	2.7		26 13 47.0	17.16	0.04	1.2346	9.7135	9.8908	9.5779
1418	7674	6.5*	A	57 10.98	2.941	+0.001	10 47 00.9	17.24	-0.001	1.2366	9.7081	9.7175	9.2065
1419	7676	6*	B	57 15.74	2.189		52 16 48.5	17.24		1.2366	9.7078	9.8255	9.8337
1420	7679	6.8	C	21 57 36.39	+2.454		42 12 41.9	+17.26		1.2370	9.7067	9.8218	9.7622
1421	7683	6*	B	21 57 52.46	+2.009	-0.003	57 23 51.9	+17.27	-0.014	1.2373	9.7059	9.8207	9.8607
1422	7681	6.5*	C	57 54.10	2.414		44 02 53.2	17.27		1.2374	9.7058	9.8228	9.7774
1423	7696	6.7*	A	59 49.61	1.948	+0.005	59 12 32.2	17.36	0.018	1.2395	9.6995	9.8144	9.8714
1424	7693	6*	A	59 54.91	2.710	+0.001	23 21 26.9	17.36	-0.003	1.2396	9.6993	9.7920	9.6141
1425	7695	6.5	C	21 59 59.16	+2.364		46 37 36.5	+17.37		1.2397	9.6990	9.8206	9.7990
1426	7698	6.6	B	22 0 08.15	+1.948		59 15 39.7	+17.37		1.2398	9.6985	9.8136	9.8719
1427	7699	5.9	B	0 08.19	1.788	-0.007	62 30 42.5	17.37	+0.016	1.2398	9.6985	9.8045	9.8857
1428	7700	5.4*	A	0 10.00	1.701		64 01 08.4	17.37	+0.064	1.2399	9.6984	9.8055	9.8914
1429	Gr. 3680	6.5	A	0 57.22	2.345		47 37 25.5	17.41		1.2407	9.6958	9.8190	9.8070
1430	7705	6.5*	B	22 0 58.29	+2.421		44 24 25.6	+17.41		1.2408	9.6958	9.8177	9.7836

(1371) 7582. The variable μ Cephei.

(1381) 7602. A. R. relatively uncertain; the declinations are very numerous, but do not agree well.

(1395) Gr. 3594. Declination quite uncertain.

(1418) No. 971 = B. A. C. 7676. Two observations at Washington (1873) give $48^{\circ}.0$.(1428) = B. A. C. 7700: following star. Companion is $0^{\circ}.98$ preceding and $2^{\circ}.0$ north.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. <i>a'</i> .	Log. <i>b'</i> .	Log. <i>c'</i> .	Log. <i>d'</i> .
				<i>h. m. s.</i>			<i>° ' "</i>						
1431	7706	4*	A	22 1 11.54	+2.766	+0.022	24 44 07.2	+17.42	+0.026	1.2410	9.6950	9.7694	9.5128
1432	7707	6.5*	A	1 12.48	1.816	-0.003	62 10 34.0	17.42	+0.035	1.2410	9.6950	9.8066	9.8855
1433	7708	6.5*	A	1 17.97	1.843	+0.009	61 40 19.4	17.42	-0.04	1.2411	9.6947	9.8073	9.8835
1434	7712	6*	A	1 58.16	2.817	+0.001	21 05 42.7	17.45	-0.064	1.2418	9.6924	9.7650	9.4959
1435	Gr. 3690	6.2	C	22 2 48	+2.2	.	52 41 49.5	+17.49	.	1.2427	9.6897	9.8144	9.8412
1436	7718	6.7	C	22 2 57.10	+2.016	.	58 13 51.4	+17.49	.	1.2429	9.6891	9.8089	9.8702
1437	7721	5.7*	A	3 41.40	2.656	-0.003	32 33 44.0	17.53	-0.066	1.2436	9.6866	9.7974	9.6722
1438	7727	6.9	C	3 44.37	2.367	.	47 19 21.4	17.53	.	1.2437	9.6865	9.8138	9.8089
1439	7736	6.5	B	4 21.86	2.009	.	58 40 52.8	17.55	.	1.2444	9.6843	9.8052	9.8738
1440	7731	4*	A	4 26.22	+2.659	.	32 33 55.3	+17.56	-0.016	1.2444	9.6841	9.7964	9.6733
1441	7737	7.6	C	22 4 34.89	+2.476	.	42 34 24.6	+17.56	.	1.2446	0.6836	9.8102	9.7727
1442	7733	6*	A	4 35.75	2.832	.	20 21 52.4	17.56	+0.014	1.2446	9.6835	9.7594	9.4840
1443	7738	8.0	A	4 45.04	2.030	.	58 14 21.4	17.57	.	1.2448	9.6830	9.8049	9.8722
1444	7742	6.3	A	5 49.13	2.895	.	15 25 31.5	17.62	.	1.2459	9.6793	9.7367	9.3666
1445	7743	6.7	C	22 5 51.97	+2.487	.	42 24 59.4	+17.62	.	1.2459	9.6791	9.8079	9.7728
1446	7746	5.6*	B	22 6 18.60	+2.307	+0.018	50 12 22.3	+17.64	.	1.2464	9.6776	9.8085	9.8298
1447	7749	3.4*	A	6 31.10	2.071	0.002	57 35 07.9	17.64	-0.008	1.2466	9.6768	9.8019	9.8709
1448	7753	6.5*	B	7 16.02	2.645	.	33 59 19.8	17.68	-0.05	1.2473	9.6742	9.7950	9.6926
1449	7755	6.5*	B	7 16.28	2.029	0.007	58 47 53.9	17.68	-0.028	1.2474	9.6742	9.7984	9.8773
1450	7754	6*	B	22 7 18.11	+2.127	+0.023	56 13 05.7	+17.68	+0.112	1.2474	9.6741	9.8019	9.8649
1451	Gr. 3715	6.3	C	22 7 38	+2.0	.	58 27 50.9	+17.69	.	1.2477	9.6729	9.7932	9.8762
1452	7760	6*	A	7 47.39	1.388	-0.009	69 30 55.1	17.70	.	1.2479	9.6724	9.7726	9.9174
1453	7759	6*	B	7 54.05	1.977	.	60 08 28.9	17.70	.	1.2480	9.6720	9.7948	9.8840
1454	7757	6*	B	7 55.08	2.737	.	27 59 22.0	17.70	.	1.2480	9.6719	9.7808	9.6173
1455	7766	6*	B	22 8 28.67	+1.861	-0.016	62 40 23.8	+17.72	-0.05	1.2486	9.6699	9.7886	9.8950
1456	7765	5*	A	22 8 30.78	+2.563	.	39 05 43.3	+17.73	.	1.2486	9.6698	9.8004	9.7462
1457	Gr. 3717	6*	C	8 41	2.4	.	44 49 16.5	17.73	.	1.2488	9.6692	9.8040	9.7947
1458	7770	6*	C	9 29.21	2.506	.	42 20 05.0	17.77	.	1.2496	9.6663	9.8014	9.7757
1459	7775	7.0	A	9 53.89	1.882	-0.007	62 32 33.0	17.78	-0.014	1.2500	9.6648	9.7854	9.8959
1460	7778	5.4*	A	22 10 26.12	+2.145	+0.056	56 25 14.4	+17.80	.	1.2505	9.6628	9.7947	9.8690
1461	7777	5.4*	A	22 10 31.28	+2.606	-0.004	37 07 36.7	+17.81	0.00	1.2506	9.6625	9.7948	9.7292
1462	Arg. 228	7.0	B	11 00.35	2.939	+0.057	12 16 18.1	17.83	+0.052	1.2511	9.6607	9.7171	9.2764
1463	7782	6.5	C	11 55.73	2.150	.	56 35 49.0	17.86	.	1.2520	9.6573	9.7910	9.8714
1464	XXII, 60	6.8	C	12 48	2.9	.	19 20 19.7	17.90	-0.04	1.2528	9.6541	9.7472	9.4707
1465	XXII, 65	6.7*	B	22 13 27.32	+2.617	.	37 08 31.8	+17.92	+0.06	1.2534	9.6516	9.7900	9.7322
1466	7786	7.0	B	22 13 31.76	+1.757	.	65 30 13.2	+17.93	0.00	1.2535	9.6513	9.7691	9.9104
1467	7787	7.5	C	13 48.28	2.305	.	52 01 49.5	17.94	.	1.2538	9.6503	9.7919	9.8483
1468	7789	6.7*	B	14 08.02	1.942	+0.003	62 10 41.1	17.95	+0.005	1.2541	9.6490	9.7757	9.8986
1469	XXII, 69	6.5	C	14 36	2.9	.	13 24 20.3	17.97	.	1.2545	9.6472	9.7201	9.3176
1470	R. C. 5653	6.8	B	22 15 06.24	+2.066	.	59 31 14.0	+17.99	.	1.2550	9.6453	9.7788	9.8882
1471	7796	5*	A	22 15 21.91	+2.950	.	11 34 33.7	+18.00	-0.007	1.2552	9.6443	9.7106	9.2556
1472	7799	6.7*	C	15 30.97	2.189	.	56 17 24.1	18.00	.	1.2554	9.6437	9.7832	9.8733
1473	7798	5*	A	15 33.06	2.762	.	27 42 05.3	18.00	0.00	1.2554	9.6436	9.7699	9.6206
1474	7800	5.4*	B	15 51.80	2.465	.	45 54 26.8	18.02	-0.022	1.2557	9.6424	9.7904	9.8098
1475	Gr. 3750	6.7*	C	22 16 30	+2.6	.	41 26 54.3	+18.04	.	1.2563	9.6399	9.7882	9.7749
1476	7803	8.0	B	22 16 41.66	+2.526	.	43 06 57.2	+18.05	-0.03	1.2565	9.6391	9.7885	9.7890
1477	7807	6.7*	A	17 3-70	2.858	+0.024	20 13 02.0	18.09	-0.021	1.2573	9.6354	9.7454	9.4937
1478	7810	6.7*	A	18 02.01	1.774	+0.007	66 04 30.9	18.10	0.00	1.2577	9.6339	9.7554	9.9165
1479	7812	6.7	B	18 23.54	2.200	.	56 39 10.8	18.11	.	1.2580	9.6324	9.7759	9.8777
1480	7813	7.2	B	22 18 25.42	+2.242	.	55 19 52.4	+18.11	-0.02	1.2580	9.6323	9.7778	9.8710
1481	7815	5.4*	AA	22 18 38.78	+2.349	.	51 36 11.7	+18.12	-0.195	1.2582	9.6314	9.7817	9.8502
1482	7820	5*	B	19 26.90	2.421	-0.003	48 50 34.7	18.15	-0.03	1.2589	9.6282	9.7820	9.8335
1483	7824	7.0	C	20 03.14	2.383	.	50 37 16.1	18.18	+0.003	1.2595	9.6257	9.7794	9.8465
1484	7825	7.6	C	20 22.02	2.406	.	49 46 01.8	18.19	.	1.2598	9.6244	9.7794	9.8404
1485	Gr. 3771	7.1	C	22 20 55	+2.3	.	53 10 52.0	+18.21	.	1.2602	9.6222	9.7749	9.8614
1486	Gr. 3772	7.1	C	22 21 02	+2.3	.	53 18 32.9	+18.21	.	1.2603	9.6217	9.7744	9.8623
1487	7829	7.0	B	21 35.85	1.993	.	62 41 33.4	18.23	.	1.2608	9.6194	9.7551	9.9074
1488	Is Heis. Lac.	6*	C	21 58	2.6	.	39 10 25.6	18.24	.	1.2612	9.6179	9.7770	9.7595
1489	XXII, 113	6.5*	B	22 02.74	2.735	.	31 12 06.1	18.25	.	1.2612	9.6175	9.7678	9.6734
1490	Gr. 3779	7.3	C	22 22 43	+2.4	.	50 51 20.8	+18.27	.	1.2618	9.6147	9.7733	9.8493
1491	Gr. 3780	7.0	C	22 22 54	+2.4	.	50 56 18.6	+18.28	.	1.2620	9.6140	9.7728	9.8499
1492	7837	6.5*	B	23 04.14	1.921	-0.001	64 29 42.4	18.29	-0.006	1.2621	9.6133	9.7461	9.9154
1493	7843	6.5*	A	24 18.83	2.733	+0.002	31 56 00.1	18.33	-0.012	1.2631	9.6080	9.7654	9.6844
1494	7845	5*	B	24 19.37	2.489	-0.002	47 04 02.6	18.33	-0.03	1.2632	9.6079	9.7726	9.8256
1495	7846	6.5	C	22 24 28.72	+2.337	.	53 36 23.4	+18.34	.	1.2633	9.6073	9.7659	9.8669

(1439) B. A. C. 7736. The north preceding of a pair of nearly equal stars.

(1463) B. A. C. 7782. Declination confirmed by Washington, 1874, which gives 49°.5 from two observations.

(1495) B. A. C. 7846. Declination confirmed by Washington, 1874, which gives 23°.6 from two observations.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. <i>a'</i> .	Log. <i>b'</i> .	Log. <i>c'</i> .	Log. <i>d'</i> .
				<i>h. m. s.</i>			<i>° ' "</i>						
1496	7847	7.5	A	22 24 30.98	+2.213	+0.008	57 45 52.0	+18.34	-0.036	1.2633	9.6071	9.7587	9.8885
1497	7848	Var.	A	24 31.92	2.213	+0.002	57 46 32.4	18.34	0.023	1.2633	9.6070	9.7586	9.8885
1498	7850	5*	B	25 05.57	2.578	-0.002	42 28 59.1	18.36	-0.01	1.2638	9.6046	9.7721	9.7912
1499	7855	4*	A	26 08.64	2.445	+0.014	49 38 25.0	18.39	0.00	1.2647	9.6001	9.7667	9.8445
1500	7856	6*	A	22 26 33.09	+2.882	+0.012	19 35 11.4	+18.41	+0.007	1.2650	9.5983	9.7338	9.4882
1501	7858	6*	A	22 26 54.92	+2.641	-	39 08 14.2	+18.42	-0.02	1.2653	9.5967	9.7678	9.7633
1502	7871	6.7*	B	28 49.67	2.304	-	55 58 42.4	18.49	-	1.2668	9.5882	9.7512	9.8832
1503	7875	6.7*	C	29 24.01	2.137	-	61 07 58.9	18.51	+0.04	1.2673	9.5856	9.7378	9.9075
1504	7876	6.7*	A	29 25.52	1.711	+0.020	69 16 00.5	18.51	0.065	1.2673	9.5855	9.7107	9.9361
1505	7878	6.2	B	22 29 44.96	+1.682	+0.008	69 43 42.4	+18.52	+0.01	1.2676	9.5840	9.7078	9.9376
1506	XXII, 158	6.3	C	22 29 48	+2.9	-	19 37 53.6	+18.52	-0.12	1.2676	9.5838	9.7304	9.4918
1507	7879	6.6	A	30 18.55	2.658	-	38 58 54.2	18.54	0.02	1.2680	9.5814	9.7614	9.7646
1508	7880	6.1	A	30 18.71	2.658	-	38 59 16.4	18.54	-0.02	1.2680	9.5814	9.7614	9.7646
1509	7882	6.3	C	30 41.93	2.478	-	49 25 26.3	18.55	-	1.2683	9.5796	9.7564	9.8467
1510	7888	5.6*	B	22 32 14.52	+2.456	-0.003	50 54 00.7	+18.60	-0.114	1.2695	9.5724	9.7510	9.8577
1511	7893	6*	A	22 32 49.66	+2.901	-0.004	18 52 33.6	+18.62	-0.033	1.2700	9.5697	9.7248	9.4777
1512	7894	6.8	B	32 53.01	2.583	-	44 32 01.7	18.62	-	1.2700	9.5694	9.7555	9.8138
1513	Gr. 3845	6.7	C	33 14	2.1	-	63 07 11.5	18.63	-	1.2703	9.5677	9.7209	9.9185
1514	Gr. 3843	6.7	B	33 18.48	2.600	+0.028	43 39 43.8	18.63	+0.06	1.2703	9.5674	9.7550	9.8072
1515	7901	5*	A	22 33 39.25	+2.6-1	+0.001	38 24 00.4	+18.65	-0.011	1.2706	9.5656	9.7547	9.7616
1516	7900	6*	A	22 33 43.70	+2.902	-	19 01 51.4	+18.65	-	1.2706	9.5654	9.7243	9.4818
1517	7902	5.6*	A	34 13.15	2.115	-0.002	62 56 05.7	18.66	-0.035	1.2710	9.5630	9.7185	9.9185
1518	Gr. 3849	7.2	C	34 31	2.6	-	40 39 46.2	18.67	-	1.2712	9.5616	9.7532	9.7830
1519	XXII, 186	6*	C	34 40	2.9	-	13 53 52.6	18.68	+0.10	1.2713	9.5609	9.7062	9.3496
1520	7906	5*	A	22 35 02.02	+2.609	+0.006	43 37 26.9	+18.69	+0.004	1.2716	9.5591	9.7513	9.8082
1521	7908	3.4*	AA	22 35 13.64	+2.984	+0.004	10 10 45.9	+18.70	-0.020	1.2717	9.5581	9.6910	9.2169
1522	7913	7.3	B	35 42.68	2.601	-	44 21 21.5	18.71	+0.03	1.2721	9.5557	9.7494	9.8145
1523	7912	6.5*	B	35 47.10	2.952	-	13 51 51.5	18.71	-	1.2722	9.5554	9.7053	9.3295
1524	7915	6*	A	35 53.01	2.674	+0.003	39 34 22.9	18.72	-0.004	1.2722	9.5549	9.7506	9.7742
1525	7914	5*	A	22 35 53.44	+2.809	+0.002	28 39 20.1	+18.72	-0.032	1.2722	9.5549	9.7426	9.6509
1526	7917	6.1	C	22 36 00.72	+2.656	-	40 53 39.7	+18.72	+0.07	1.2722	9.5543	9.7502	9.7867
1527	Arg. 233	7.1	A	36 37.47	2.010	+0.035	65 54 24.9	18.74	+0.372	1.2728	9.5512	9.7008	9.9308
1528	7923	3*	A	37 08.65	2.803	+0.003	29 34 04.8	18.76	-0.04	1.2731	9.5486	9.7419	9.6640
1529	Gr. 3867	7.5	C	38 10	2.6	-	43 52 31.9	18.79	-	1.2739	9.5435	9.7443	9.8125
1530	7931	6*	C	22 38 26.78	+2.696	-	35 48 39.5	+18.80	-	1.2741	9.5420	9.7454	9.7690
1531	7932	6*	A	22 38 31.14	+2.664	-	41 09 49.0	+18.80	+0.014	1.2741	9.5417	9.7449	9.7903
1532	Gr. 3873	7.0	C	39 13	2.7	-	38 32 44.9	18.82	-	1.2746	9.5381	9.7438	9.7669
1533	7937	6*	A	39 23.35	2.912	-0.001	18 42 29.4	18.83	+0.072	1.2747	9.5372	9.7172	9.4787
1534	Gr. 3877	7.0	C	39 37	2.5	-	51 51 36.7	18.83	-	1.2749	9.5361	9.7310	9.8684
1535	XXII, 214	7.2	B	22 39 44.78	+2.808	-0.023	29 47 52.4	+18.84	-0.373	1.2750	9.5354	9.7380	9.6691
1536	7943	5.4*	A	22 40 26.85	+2.978	+0.013	11 31 56.7	+18.86	-0.373	1.2755	9.5317	9.6930	9.2742
1537	7945	4*	A	40 30.64	2.879	0.003	22 54 30.0	18.86	-0.013	1.2755	9.5314	9.7259	9.5636
1538	7948	6.7*	C	40 37.74	2.634	+0.015	43 53 14.2	18.86	-	1.2756	9.5308	9.7388	9.8143
1539	7950	6.5	B	40 53.11	2.610	-	45 33 29.2	18.87	-0.03	1.2757	9.5294	9.7367	9.8273
1540	7953	6.7*	B	22 42 25.68	+2.365	+0.006	57 49 26.0	+18.91	0.00	1.2768	9.5212	9.7094	9.9022
1541	7958	4*	A	22 43 58.24	+2.878	-0.001	23 56 31.3	+18.96	-0.05	1.2778	9.5128	9.7232	9.5840
1542	XXII, 232	6.7*	C	44 32	2.9	-	18 28 49.2	18.97	-	1.2782	9.5097	9.7110	9.4770
1543	7961	5.9	B	44 36.81	2.449	-	55 14 23.6	18.98	-	1.2782	9.5092	9.7099	9.8907
1544	7962	6*	C	44 43.64	2.692	-	41 17 30.9	18.98	-0.01	1.2783	9.5086	9.7315	9.7966
1545	7963	6.7*	B	22 44 45.62	+2.009	+0.020	67 54 27.8	+18.98	+0.10	1.2783	9.5085	9.6643	9.9130
1546	Gr. 3901	6.7	C	22 44 48	+2.6	-	50 00 55.4	+18.98	-	1.2784	9.5082	9.7208	9.8605
1547	R. C. 5853	7.0	C	45 10	2.1	-	65 53 33.2	18.99	-	1.2786	9.5062	9.6721	9.9368
1548	7964	8	B	45 11.04	2.970	+0.021	13 18 03.0	18.99	+0.23	1.2786	9.5061	9.6955	9.3383
1549	7967	3.4*	A	45 14.05	2.129	-0.012	65 32 35.0	18.99	-0.144	1.2786	9.5058	9.6734	9.9357
1550	L. L. 44750	7.0	C	22 45 47	+2.6	-	48 04 14.8	+19.01	-	1.2790	9.5027	9.7215	9.8483
1551	7972	6.5*	A	22 46 23.91	+2.682	+0.010	42 38 54.1	+19.03	+0.01	1.2794	9.4992	9.7267	9.8081
1552	7973	6*	A	46 30.14	2.310	-	61 01 56.5	19.03	+0.027	1.2794	9.4986	9.6866	9.9192
1553	7975	6.5*	A	46 53.17	2.949	-	16 10 42.3	19.04	-	1.2797	9.4964	9.7025	9.4225
1554	Gr. 3913	7.4	C	47 15	2.6	-	50 02 29.8	19.05	-	1.2799	9.4943	9.7143	9.8623
1555	7978	6.7	C	22 47 28.76	+2.728	-	39 30 13.5	+19.06	-	1.2800	9.4930	9.7265	9.7814
1556	A. Ö. 24834	6.3	C	22 48 04	+2.4	-	59 26 11.5	+19.07	-	1.2804	9.4896	9.6870	9.9133
1557	7983	6.7*	B	48 04.66	2.671	-	44 05 05.7	19.07	-	1.2804	9.4895	9.7213	9.8207
1558	7984	6*	B	48 22.90	2.730	-	39 42 34.5	19.08	0.00	1.2806	9.4878	9.7245	9.7849
1559	43 Heis Lacer	6*	C	49 55	2.8	-	35 41 04.8	19.12	-	1.2815	9.4786	9.7227	9.7453
1560	7994	6.5*	A	22 50 41.31	+2.726	-0.001	40 56 13.4	+19.14	-0.002	1.2820	9.4740	9.7185	9.7962

(1496, 1497) 7847, 7848. Maximum, with comp., 3.7m.*; minimum, 4.9m.*

(1502) 7871. A. R. uncertain.

(1519) Pi. XXII, 186. Including late Greenwich observations we have decl. $13^{\circ} 53' 33''.7 + 0''.12$ ($t - 1875$), Class A. The A. R. will be about $22^{\text{h}} 34^{\text{m}} 41''.08 + 0''.020$ ($t - 1875$).

(1558) 7984. A. R. very uncertain.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. <i>a'</i> .	Log. <i>b'</i> .	Log. <i>c'</i> .	Log. <i>d'</i> .
				<i>h. m. s.</i>			<i>° ' "</i>						
1561	7995	6.5*	B	22 50 57.39	+2.614	...	49 03 59.2	+19.15	-0.03	1.2821	9.4720	9.7062	9.8582
1562	7997	6.5*	A	51 19.61	2.927	+0.017	20 05 56.7	19.16	+0.06	1.2824	9.4701	9.7066	9.8563
1563	7999	5.6*	A	51 33.26	2.634	...	48 00 59.6	19.16	-0.02	1.2825	9.4687	9.7067	9.8515
1564	Gr. 3935	7	C	51 50	2.8	...	38 43 16.8	19.17	+0.05	1.2827	9.4670	9.7175	9.7768
1565	Gr. 3936	6.5	C	22 51 54	+2.8	...	38 38 27.6	+19.17	...	1.2827	9.4665	9.7175	9.7760
1566	8003	6*	A	22 52 56.63	+2.996	+0.001	11 03 40.9	+19.20	-0.042	1.2833	9.4600	9.6823	9.2641
1567	8013	6.5	B	54 01.98	2.436	...	59 08 43.7	19.23	...	1.2839	9.4531	9.6686	9.9155
1568	Gr. 3947	6.5	C	54 55	2.7	...	44 42 16.2	19.25	...	1.2844	9.4474	9.7037	9.8295
1569	8023	4.3*	A	56 10.34	2.744	+0.002	41 39 16.2	19.28	-0.012	1.2851	9.4392	9.7049	9.8055
1570	8024	4.5*	B	22 56 13.86	+2.517	+0.001	56 26 03.1	+19.28	+0.014	1.2851	9.4388	9.6710	9.9041
1571	XXII, 283	6.5	C	22 56 24	+3.0	...	15 33 36.0	+19.29	...	1.2852	9.4377	9.6915	9.4116
1572	XXII, 285	6.7*	C	56 38	2.9	...	22 27 32.4	19.29	-0.05	1.2852	9.4361	9.7035	9.5653
1573	8028	6*	B	56 51.19	2.742	+0.003	42 05 08.0	19.30	0.03	1.2855	9.4346	9.7027	9.8095
1574	Gr. 3964	7.0	B	57 14.51	2.465	...	59 10 50.0	19.30	-0.03	1.2857	9.4321	9.6576	9.9174
1575	Gr. 3965	6.7*	C	22 57 21	+2.6	...	54 33 49.2	+19.31	...	1.2857	9.4313	9.6735	9.8916
1576	8032	Var.	A	22 57 42.92	+2.885	+0.015	27 24 18.6	+19.32	+0.14	1.2859	9.4284	9.7065	9.6468
1577	8033	6.7	B	58 13.66	2.460	...	59 46 22.2	19.33	...	1.2862	9.4253	9.6518	9.9206
1578	8034	2*	AA	58 32.07	2.979	+0.006	14 31 59.0	19.34	-0.031	1.2864	9.4232	9.6871	9.3538
1579	8036	5*	A	58 34.44	2.658	+0.016	49 22 22.3	19.34	+0.146	1.2864	9.4230	9.6844	9.8644
1580	8037	7.7	C	22 58 37	+2.767	...	40 36 04.1	+19.34	...	1.2864	9.4228	9.7018	9.7974
1581	8039	5.6*	A	22 58 47.68	+2.259	...	66 32 08.1	+19.34	...	1.2865	9.4214	9.6179	9.9469
1582	XXII, 297	7.6	C	22 59 20	3.0	...	14 17 06.8	19.35	...	1.2868	9.4177	9.6858	9.3769
1583	8052	5*	A	23 1 01.56	2.914	+0.001	24 47 38.4	19.39	-0.021	1.2876	9.4057	9.6905	9.6080
1584	118 Heis. Peg	6.5*	C	1 19	2.9	...	20 27 36.7	19.40	0.05	1.2878	9.4037	9.6947	9.5291
1585	8054	5*	B	23 1 20.26	+2.513	+0.005	58 44 39.9	+19.40	-0.022	1.2878	9.4034	9.6450	9.9175
1586	8056	6.5	B	23 1 35.14	+2.729	+0.006	45 23 31.6	+19.40	-0.05	1.2879	9.4016	9.6850	9.8382
1587	Gr. 3990	6.5	B	1 53.95	2.511	...	59 03 06.0	19.41	...	1.2880	9.3993	9.6417	9.9192
1588	8058	6*	B	1 56.54	2.728	...	45 42 44.6	19.41	+0.015	1.2881	9.3990	9.6834	9.8407
1589	8059	6.7*	B	2 04.82	2.692	+0.013	48 36 54.3	19.41	+0.12	1.2881	9.3980	9.6763	9.8612
1590	Gr. 3993	6.2	C	23 2 42	+2.4	...	62 57 26.7	+19.43	...	1.2885	9.3934	9.6208	9.9360
1591	8068	6.3	C	23 2 53.05	+2.408	...	63 32 47.7	+19.43	...	1.2885	9.3921	9.6171	9.9383
1592	R. C. 5973	6.9	C	3 04	2.8	...	38 14 19.6	19.44	...	1.2886	9.3907	9.6928	9.7781
1593	D.M. 64, 1764	6.8	C	4 14	2.4	...	64 32 03.5	19.46	...	1.2892	9.3819	9.6110	9.9426
1594	8075	6.5*	B	4 23.78	2.544	+0.005	58 39 18.0	19.46	-0.01	1.2892	9.3807	9.6344	9.9186
1595	XXIII, 4	6*	C	23 4 30	+3.0	...	16 55 04.1	+19.47	...	1.2893	9.3799	9.6856	9.4510
1596	8076	6.7*	B	23 4 40.80	+2.774	-0.021	42 52 23.0	+19.47	-0.18	1.2894	9.3785	9.6818	9.8200
1597	8077	6.7	A	4 59.72	2.338	...	66 33 48.9	19.48	...	1.2895	9.3760	9.5918	9.9500
1598	8079	6*	A	5 45.18	2.917	-0.017	26 10 20.8	19.49	-0.114	1.2899	9.3701	9.6927	9.6322
1599	8082	5*	A	6 49.61	2.721	+0.008	48 43 24.9	19.52	+0.086	1.2904	9.3616	9.6618	9.8642
1600	8083	6*	A	23 7 16.18	+2.611	+0.249	56 28 42.0	+19.52	+0.268	1.2906	9.3581	9.6334	9.9094
1601	XXIII, 20	6.7	C	23 7 47	+3.0	...	18 57 15.2	+19.00	...	1.2908	9.3539	9.6846	9.5002
1602	Gr. 4017	6.5	C	8 32	2.7	...	49 56 16.4	19.55	...	1.2911	9.3477	9.6529	9.8728
1603	8091	7.0	B	8 51.80	2.918	...	27 23 26.4	19.56	...	1.2913	9.3449	9.6876	9.6519
1604	Gr. 4020	7.1	C	9 13	2.8	...	45 50 38.7	19.56	...	1.2914	9.3420	9.6627	9.8450
1605	8097	6.5	A	23 9 40.09	+2.919	+0.001	27 34 00.7	+19.57	+0.003	1.2916	9.3382	9.6862	9.6548
1606	130 Heis. Peg	6*	C	23 9 48	+2.9	...	24 05 22.2	+19.57	...	1.2917	9.3370	9.6856	9.6003
1607	8099	8.2	C	9 57.68	2.920	...	27 32 44.4	19.57	...	1.2917	9.3356	9.6856	9.6546
1608	8107	6*	A	11 00.64	2.701	+0.007	52 32 22.7	19.60	-0.27	1.2922	9.3266	9.6358	9.8897
1609	8110	6*	C	11 23.78	2.795	...	44 29 02.6	19.60	-0.07	1.2923	9.3231	9.6599	9.8357
1610	XXIII, 34	7.0	C	23 11 25	+3.0	...	17 37 25.6	+19.60	...	1.2923	9.3230	9.6787	9.4713
1611	8114	5.6*	B	23 11 57.11	+2.757	+0.003	48 19 57.2	+19.61	+0.003	1.2925	9.3183	9.6473	9.8637
1612	8115	6.5	C	12 04.14	2.795	...	44 48 24.9	19.62	...	1.2926	9.3172	9.6572	9.8384
1613	8118	6*	B	12 27.70	2.831	-0.003	41 05 27.9	19.62	-0.018	1.2927	9.3137	9.6650	9.8083
1614	8120	6.8	C	13 69	2.804	...	44 27 13.9	19.63	...	1.2930	9.3075	9.6550	9.8362
1615	8124	5.6*	A	23 13 29.98	+2.423	+0.015	67 25 39.9	+19.64	+0.007	1.2932	9.3043	9.5473	9.9564
1616	8125	6*	A	23 13 40.56	+2.774	+0.001	47 56 23.8	+19.64	+0.037	1.2932	9.3026	9.6432	9.8617
1617	8126	6.5	A	13 49.64	2.777	0.019	47 41 46.2	19.65	0.04	1.2933	9.3013	9.6435	9.8601
1618	8128	6*	A	13 55.60	2.836	0.005	41 23 38.5	19.65	+0.016	1.2933	9.3003	9.6594	9.8115
1619	8131	5.4*	A	14 27.09	2.959	+0.002	23 03 22.9	19.66	-0.019	1.2935	9.2954	9.6741	9.5842
1620	XXIII, 57	6.7*	C	23 14 42	+3.0	...	16 34 03.9	+19.66	+0.07	1.2936	9.2931	9.6738	9.4465
1621	8133	6.5*	B	23 14 42.30	+2.921	+0.003	29 43 59.0	+19.66	-0.068	1.2936	9.2930	9.6759	9.6869
1622	8137	6.5	B	14 47.24	2.593	...	61 17 11.3	19.66	0.00	1.2937	9.2923	9.5802	9.9345
1623	8135	6.7*	B	14 49.34	2.823	...	43 26 00.1	19.66	...	1.2937	9.2919	9.6530	9.8288
1624	Gr. 4043	6.7	B	14 50.04	2.624	...	59 35 26.5	19.66	-0.03	1.2937	9.2918	9.5894	9.9272
1625	8136	6*	A	23 14 51.41	+2.870	+0.010	37 30 00.3	+19.67	-0.076	1.2937	9.2916	9.6659	9.7760

(1576) 8032. Maximum magnitude, 2.2*; minimum, 2.7*. (1579) 8036. A. R. relatively uncertain.
 (1625) No. 1106 = B. A. C. 8136. Two Washington observations of 1873 give 1".0.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a'.	Log. b'.	Log. c'.	Log. d'.
				<i>h. m. s.</i>			<i>° ' "</i>						
1626	8138	6*	B	23 15 07.46	+2.591	-0.006	61 31 43.5	+19.67	-0.03	1.2933	9.2891	9.5773	9.9356
1627	8139	7.3	A	15 16.92	2.869	-0.003	37 53 54.0	19.67	0.00	1.2938	9.2875	9.6642	9.7799
1628	8141	6*	A	15 48.88	2.916		31 07 40.2	19.68	-0.02	1.2940	9.2824	9.6725	9.7053
1629	8146	6*	B	16 27.10	2.978	+0.001	20 08 39.1	19.69	+0.01	1.2943	9.2761	9.6743	9.5292
1630	8147	7.2	A	23 16 32.51	+2.980	+0.026	19 52 27.0	+19.69	0.00	1.2943	9.2753	9.6741	9.5236
1631	8149	6.5*	A	23 16 46.29	+3.018	+0.003	11 37 44.2	+19.70	-0.023	1.2944	9.2730	9.6654	9.2967
1632	8153	6.0	B	16 58.37	2.647	0.001	59 26 54.3	19.70	-0.01	1.2945	9.2710	9.5812	9.9274
1633	8156	6.7	B	17 39.12	2.918	+0.024	31 50 38.6	19.71	0.00	1.2947	9.2642	9.6680	9.7148
1634	4052	6.5	C	18 09	2.9		40 55 37.0	19.72		1.2949	9.2590	9.6501	9.8090
1635	8158	7.0	C	23 18 27.32	+2.702	+0.004	56 50 59.0	+19.72		1.2950	9.2559	9.5891	9.9157
1636	8159	6*	A	23 18 43.78	+2.923		31 41 54.5	+19.73	+0.003	1.2951	9.2531	9.6658	9.7134
1637	8160	5.4*	A	19 08.52	2.972	+0.015	22 42 58.1	19.73	+0.03	1.2952	9.2488	9.6709	9.5798
1638	8162	6.5*	A	19 17.52	2.634	0.003	61 35 48.0	19.74	-0.012	1.2953	9.2472	9.5585	9.9374
1639	8173	6.8	A	21 00.93	2.450	0.003	69 59 49.3	19.76	0.00	1.2959	9.2286	9.4878	9.9667
1640	8171	6*	B	23 21 06.12	+2.866	+0.007	42 13 26.3	+19.77	+0.02	1.2959	9.2277	9.6386	9.8211
1641	8174	6*	A	23 21 27.78	+2.969	-0.001	24 28 51.2	+19.77	-0.038	1.2960	9.2236	9.6667	9.6112
1642	8180	6*	A	22 00.27	2.475	+0.029	69 40 19.6	19.78	-0.023	1.2962	9.2176	9.4856	9.9661
1643	8182	5*	A	22 50.02	3.025	+0.004	12 04 16.0	19.79	+0.021	1.2964	9.2081	9.6609	9.3147
1644	4074	7.0	C	23 28	2.8		45 46 37.0	19.80		1.2966	9.2007	9.6195	9.8498
1645	8188	5*	B	23 24 15.92	+2.741		57 51 35.9	+19.81		1.2969	9.1911	9.5591	9.9225
1646	8195	6*	A	23 25 08.74	+2.910	+0.022	38 32 59.3	+19.82	0.05	1.2971	9.1804	9.6372	9.7896
1647	4083	6.7*	C	25 48	2.9		42 32 56.3	19.83		1.2973	9.1722	9.6206	9.8320
1648	4088	6.2	C	26 34	2.6		65 02 57.0	19.84		1.2975	9.1625	9.4981	9.9528
1649	8203	6.5*	A	27 12.73	2.995	+0.004	21 48 32.7	19.85	-0.032	1.2977	9.1540	9.6588	9.5655
1650	8206	5.6*	A	23 27 45.22	+2.960	+0.002	30 38 07.6	+19.85	-0.021	1.2977	9.1469	9.6482	9.7028
1651	4509	7.0	C	23 27 47	+2.7		59 21 39.5	+19.85		1.2979	9.1465	9.5336	9.9304
1652	8211	6*	A	28 27.70	2.953	+0.002	32 48 21.0	19.86	+0.035	1.2980	9.1372	9.6425	9.7297
1653	8212	6*	B	28 30.77	2.920	-0.002	39 32 51.1	19.86	-0.034	1.2980	9.1366	9.6251	9.7998
1654	151 Heis. Peg.	6.7*	C	28 45	3.0		23 44 08.5	19.87		1.2981	9.1333	9.6550	9.6007
1655	8222	6*	A	23 31 19.86	+3.023	+0.008	16 08 01.5	+19.90	-0.013	1.2988	9.0961	9.6546	9.4405
1656	8223	6.7*	B	23 31 25.67	+2.911		43 44 16.4	+19.90		1.2988	9.0946	9.6015	9.8363
1657	8224	4*	A	31 27.04	2.900	+0.016	45 46 51.3	19.90	-0.423	1.2988	9.0943	9.5929	9.8519
1658	8227	6.5*	A	31 38.19	3.018	+0.009	17 42 29.2	19.90	+0.009	1.2988	9.0915	9.6541	9.4798
1659	8229	4*	A	32 00.54	2.922		42 34 34.1	19.90	-0.006	1.2989	9.0858	9.6041	9.8270
1660	4110	7.2	C	23 32 27	+2.8		57 57 46.0	+19.91		1.2990	9.0788	9.5209	9.9251
1661	8231	6.5*	B	23 33 05.07	+2.886	-0.002	49 46 47.0	+19.92	-0.006	1.2992	9.0688	9.5678	9.8798
1662	8237	4.5*	A	34 15.23	2.928	+0.004	43 38 31.5	19.93	-0.01	1.2994	9.0496	9.5926	9.8362
1663	4125	6.7*	C	35 21	2.9		48 49 12.3	19.94		1.2996	9.0308	9.5641	9.8741
1664	8245	6.7*	B	36 05.68	2.934		44 17 58.2	19.94		1.2998	9.0175	9.5835	9.8417
1665	8247	7.3	A	23 36 11.96	+3.026		17 58 27.6	+19.95		1.2999	9.0156	9.6480	9.4870
1666	8248	6.7*	A	23 36 23.19	+3.033	+0.007	15 38 31.4	+19.95	+0.017	1.2999	9.0122	9.6489	9.4285
1667	8252	6.5	A	37 00.68	2.897		52 27 33.0	19.95	-0.02	1.3000	9.0005	9.5363	9.8970
1668	XXIII, 164	7.5	B	37 19.52	2.865	+0.049	57 22 12.1	19.95	+0.473	1.3000	8.9941	9.5011	9.9233
1669	8256	5*	A	37 42.40	3.000	+0.007	28 40 9.3	19.96	-0.038	1.3001	8.9873	9.6307	9.6792
1670	4136	6.7*	C	23 38 43	+2.9		55 06 21.7	+19.97		1.3003	8.9672	9.5109	9.9120
1671	8261	6.5*	B	23 39 50.62	+2.951		45 43 34.8	+19.98	-0.015	1.3005	8.9437	9.5632	9.8532
1672	P. M. 2848	7.0	C	40 05	2.9		59 46 44.4	19.98		1.3006	8.9385	9.4675	9.9350
1673	P. M. 2850	7.0	C	40 35	3.0		27 43 34.8	19.98		1.3006	8.9275	9.6268	9.6661
1674	8268	5*	A	40 57.20	2.893	+0.006	57 57 20.8	19.98	+0.04	1.3007	8.9191	9.4780	9.9267
1675	4139	6.7*	C	23 41 21	+3.0		46 08 18.1	+19.99		1.3007	8.9101	9.5554	9.8565
1676	8273	5.6*	A	23 41 56.65	+2.822	0.000	67 06 44.2	+19.99	-0.006	1.3008	8.8960	9.3825	9.9630
1677	4142	7.8	C	42 03	2.8		63 07 23.3	19.99		1.3008	8.8934	9.4258	9.9490
1678	8277	6.7*	C	42 36.43	2.862		64 10 57.0			1.3009	8.8800	9.4103	9.9531
1679	8279	6*	B	42 45.45	2.886	-0.002	61 31 11.3	19.99	-0.014	1.3009	8.8760	9.4362	9.9427
1680	8280	6.5	A	23 42 46.68	+2.902		59 17 00.8	+19.99	-0.03	1.3009	8.8750	9.4565	9.9331
1681	8282	6.8	B	23 43 03.98	+2.912	+0.011	58 16 07.2	+20.00	-0.04	1.3010	8.8683	9.4639	9.9285
1682	8284	6*	A	43 19.97	3.019	+0.007	28 08 48.3	20.00	+0.015	1.3010	8.8613	9.6200	9.6725
1683	8289	6.8	B	44 07.90	2.957		50 55 39.6	20.00		1.3011	8.8400	9.5148	9.8890
1684	4149	6.9	B	44 18.83	2.891		63 02 55.3	20.00	-0.02	1.3011	8.8350	9.4109	9.9491
1685	4152	6.6	C	23 44 53	+2.9		63 17 23.2	+20.01		1.3012	8.8190	9.4047	9.9500
1686	8296	6.5*	A	23 46 02.79	+3.040	-0.001	20 58 33.3	+20.02	-0.02	1.3014	8.7842	9.6303	9.5531
1687	8299	6.5*	AA	46 07.80	3.044		18 25 34.3	20.02	-0.021	1.3014	8.7816	9.6342	9.4990
1688	8300	6*	A	46 14.63	3.057	-0.001	10 15 07.3	20.02	+0.006	1.3014	8.7781	9.6411	9.2496
1689	8301	6.6	B	46 19.12	3.040	-0.003	21 02 53.3	20.02	-0.028	1.3014	8.7757	9.6298	9.5545
1690	XXIII, 216	7.3	C	23 46 36	+3.1		11 13 50.3	+20.02		1.3014	8.7667	9.6404	9.2888

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. <i>a'</i> .	Log. <i>b'</i> .	Log. <i>c'</i> .	Log. <i>d'</i> .
				<i>h. m. s.</i>			<i>° ' "</i>						
1691	166 Heis. Peg.	6*	C	23 46 38	+3.0	...	17 12 20.2	+20.02	...	1.3014	8.7667	9.6352	9.4703
1692	8307	7.0	B	47 18.00	2.980	...	50 49 37.8	20.02	+0.02	1.3015	8.7434	9.5011	9.8888
1693	Gr. 4159	6.7*	C	47 44	3.0	...	38 35 09.6	20.02	...	1.3015	8.7283	9.5712	9.7944
1694	8310	5.4*	A	48 08.80	2.965	-0.001	56 48 13.8	20.03	-0.009	1.3016	8.7135	9.4484	9.9220
1695	8316	6.5	C	23 49 14.52	+2.991	...	52 02 20.0	+20.03	...	1.3017	8.6713	9.4829	9.8963
1696	8317	7.5	B	23 49 18.36	+2.976	...	56 42 59.0	+20.03	-0.02	1.3017	8.6689	9.4427	9.9217
1697	XXIII, 235	6*	C	50 19	3.0	...	21 57 09.5	20.03	...	1.3018	8.6257	9.6214	9.5723
1698	Gr. 4172	6*	C	50 43	3.0	...	41 57 44.9	20.04	...	1.3018	8.6070	9.5437	9.8248
1699	8322	6*	C	50 50.79	2.994	...	55 00 37.9	20.04	-0.018	1.3018	8.6013	9.4495	9.9131
1700	A. Ö. 26212	6.7	C	23 51 16	+3.0	...	59 19 40.6	+20.04	...	1.3019	8.5809	9.4050	9.9342
1701	XXIII, 238	6.7*	C	23 51 23	+3.1	...	10 46 42.8	+20.04	-0.05	1.3019	8.5751	9.6368	9.2716
1702	8324	4.5*	A	51 23.51	3.048	-0.001	24 26 47.7	20.04	-0.033	1.3019	8.5746	9.6133	9.6165
1703	8326	6.7	C	51 47.79	3.015	...	49 44 35.3	20.04	+0.23	1.3019	8.5537	9.4881	9.8823
1704	8330	5*	B	52 40.50	3.010	-0.001	55 03 32.7	20.04	-0.02	1.3019	8.5047	9.4389	9.9135
1705	Gr. 4190	7.2	C	23 52 54	+3.0	...	49 50 01.7	20.04	...	1.3020	8.4911	9.4822	9.8830
1706	8335	7.0	B	23 53 24.00	+3.064	...	10 34 38.2	+20.04	...	1.3020	8.4593	9.6353	9.2636
1707	8337	6.5	A	54 00.29	3.052	...	26 13 26.8	20.05	-0.037	1.3020	8.4176	9.6029	9.6452
1708	R. C. 6254	6.3	C	54 11	3.0	...	58 51 52.4	20.05	...	1.3021	8.4040	9.3910	9.9323
1709	8338	7.2	A	54 21.93	3.010	+0.007	61 28 53.0	20.05	-0.045	1.3021	8.3906	9.3594	9.9437
1710	R. C. 6258	7.5	C	23 54 44	+3.0	...	68 52 47.0	+20.05	...	1.3021	8.3613	9.2524	9.9692
1711	8344	6.7*	A	23 55 15.05	+3.022	+0.067	60 31 36.0	+20.05	-0.014	1.3021	8.3164	9.3646	9.9397
1712	8345	6*	C	55 20.55	3.047	...	41 40 16.5	20.05	...	1.3021	8.3079	9.5254	9.8226
1713	8350	6*	A	55 38.65	3.058	+0.065	26 25 13.7	20.05	-0.98	1.3021	8.2789	9.5988	9.6482
1714	8355	6.7*	A	56 12.62	3.022	-0.003	65 24 09.9	20.05	-0.052	1.3021	8.2184	9.2915	9.9586
1715	Gr. 4207	6.8	B	23 56 43.76	+3.054	...	42 03 07.6	+20.05	...	1.3021	8.1535	9.5208	9.8259
1716	Gr. 4216	7.0	C	23 57 45	+3.1	...	49 10 27.6	+20.05	...	1.3021	7.9906	9.4640	9.8789
1717	8359	6.5*	C	57 48.04	3.047	-0.002	61 35 29.7	20.05	-0.006	1.3021	7.9821	9.3322	9.9443
1718	8364	6.5	A	58 28.79	3.057	...	57 50 09.8	20.05	-0.05	1.3021	7.8215	9.3702	9.9276
1719	8366	5*	B	58 39.25	3.057	...	60 37 04.6	20.05	...	1.3022	7.7688	9.3385	9.9402
1720	8370	6.5*	A	23 59 16.97	+3.070	+0.002	12 42 02.0	+20.05	+0.004	1.3022	7.4954	9.6273	9.3421
1721	8372	6.5	B	23 59 44.02	+3.068	+0.034	57 44 22.7	+20.05	+0.03	1.3022	7.0650	9.3665	9.9272
1722	8373	6.5*	B	23 59 57.54	3.070	0.002	63 30 01.1	20.05	-0.005	1.3022	6.2526	9.2873	9.9518
1723	8374	7.5	A	0 0 07.55	3.071	+0.024	28 19 54.3	20.05	-0.187	1.3022	6.7396 _n	9.5817	9.6763
1724	Gr. 4237	6.7	C	1 11	3.1	...	39 27 10.7	20.05	...	1.3022	7.7126 _n	9.5207	9.8031
1725	4	2*	AA	0 1 55.71	+3.077	+0.011	28 24 01.1	+20.05	-0.157	1.3022	7.9250 _n	9.5771	9.6772
1726	7	2*	A	0 2 31.07	+3.095	+0.070	58 27 36.4	+20.05	-0.204	1.3022	8.0408 _n	9.3377	9.9305
1727	8	6.5*	B	2 35.66	3.075	+0.012	17 31 01.4	20.05	-0.018	1.3022	8.0538 _n	9.6132	9.4785
1728	Gr. 4243	7.0	C	2 59	3.1	...	45 41 33.7	20.05	...	1.3021	8.1134 _n	9.4681	9.8547
1729	13	7.7	C	3 33.77	3.092	...	45 41 43.6	20.05	...	1.3021	8.1916 _n	9.4653	9.8546
1730	14	6*	B	0 3 36.78	+3.075	+0.008	10 27 00.8	+20.05	+0.002	1.2021	8.1976 _n	9.6272	9.2585
1731	Gr. 2	7.1	C	0 3 46	+3.1	...	51 33 35.2	+20.05	...	1.3021	8.2151 _n	9.4048	9.8938
1732	16	5.6*	A	3 49.79	3.094	+0.003	45 22 35.4	20.05	+0.001	1.3021	8.2230 _n	9.4667	9.8523
1733	18	7.3	B	4 01.52	3.110	...	58 58 39.3	20.05	-0.052	1.3021	8.2442 _n	9.3193	9.9329
1734	Gr. 7	7.0	C	5 12	3.1	...	65 25 50.2	20.05	...	1.3021	8.3558 _n	9.2035	9.9587
1735	Gr. 9	6*	C	0 5 27	+3.1	...	47 27 22.1	+20.05	...	1.3020	8.3760 _n	9.4408	9.8672
1736	Gr. 13	6.5	C	0 6 02	+3.1	...	44 00 45.1	+20.04	...	1.3020	8.4203 _n	9.4680	9.8417
1737	26	3.2*	AA	6 48.01	3.081	+0.001	14 29 18.7	20.04	-0.013	1.3020	8.4723 _n	9.6156	9.3981
1738	28	6*	A	7 01.62	3.106	-0.010	40 20 42.8	20.04	-0.127	1.3020	8.4864 _n	9.4926	9.8110
1739	Gr. 24	6.9	C	8 02	3.1	...	40 20 10.9	20.04	...	1.3019	8.5443 _n	9.4886	9.8108
1740	32	5*	AA	0 8 08.26	+3.088	+0.007	19 30 41.4	+20.04	+0.009	1.3019	8.5502 _n	9.5989	9.5235
1741	46	6*	B	0 10 15.07	+3.178	...	60 50 19.1	+20.03	...	1.3017	8.6504 _n	9.2364	9.9407
1742	48	7.5	A	10 18.79	3.085	...	13 13 19.0	20.03	-0.03	1.3017	8.6531 _n	9.6150	9.3589
1743	51	6.0	C	10 33.64	3.138	...	47 15 07.3	20.03	-0.08	1.3017	8.6634 _n	9.4161	9.8654
1744	52	5.6	A	10 33.84	3.119	-0.005	37 59 15.3	20.03	0.017	1.3017	8.6635 _n	9.4964	9.7888
1745	54	6.7*	C	0 11 05.92	+3.135	...	50 44 19.1	+20.03	...	1.3016	8.6850 _n	9.3749	9.8884
1746	55	7.4	A	0 11 20.86	3.090	+0.017	15 38 13.9	+20.03	-0.03	1.3016	8.6946 _n	9.6069	9.4301
1747	58	4.5*	A	11 48.04	3.121	-0.006	36 05 31.5	20.03	-0.05	1.3016	8.7115 _n	9.5056	9.7696
1748	60	6.7*	A	12 07.10	3.137	+0.001	43 05 48.5	20.02	+0.006	1.3015	8.7230 _n	9.4483	9.8346
1749	63	7.0	A	13 28.76	3.093	...	15 33 25.2	20.02	0.00	1.3014	8.7692 _n	9.6045	9.4277
1750	65	7.3	A	0 13 56.15	+3.219	...	61 11 08.0	+20.02	...	1.3014	8.7837 _n	9.1928	9.9418
1751	R. C. 71	7.0	C	0 14 27	+3.2	...	66 18 40.8	+20.01	...	1.3013	8.7994 _n	9.0668	9.9609
1752	67	6.5*	A	14 32.44	3.135	...	37 16 33.9	20.01	-0.035	1.3013	8.8021 _n	9.4809	9.7814
1753	Gr. 52	8.0	C	14 34	3.2	...	44 14 37.0	20.01	...	1.3013	8.8029 _n	9.4259	9.8428
1754	68	6.5	A	14 46.85	3.275	-0.006	67 07 45.3	20.01	-0.05	1.3013	8.8092 _n	9.0385	9.9635
1755	73	6.2	A	0 15 57.49	+3.092	...	12 47 17.7	+20.01	+0.03	1.3011	8.8425 _n	9.6104	9.3440

(1736) Gr. 13. The declination is quite uncertain owing to possible proper motion southward.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. μ .	Log. ν .	Log. ϵ .	Log. δ .
				<i>h. m. s.</i>			<i>° ' "</i>						
1756	Gr.	55	7.1	C	0 16 04	+3.2	53 57 07.5	+20.00		1.3011	8.8454 n	9.2982	9.9066
1757		78	6.7*	B	17 26.63	3.168	43 34 17.2	19.99	-0.04	1.3009	8.8811 n	9.4182	9.8371
1758		79	6*	B	17 31.98	3.199	51 19 37.8	19.99		1.3009	8.8833 n	9.3252	9.8912
1759		80	6.5*	A	17 54.50	3.260	61 08 17.2	19.99	-0.012	1.3008	8.8924 n	9.1494	9.9411
1760		82	7.0	A	0 18 09.94	+3.096	13 37 21.2	+19.99	-0.007	1.3008	8.8986 n	9.6054	9.3707
1761		83	6*	B	0 18 21.11	+3.209	52 21 14.6	+19.99	-0.016	1.3008	8.9030 n	9.3047	9.8972
1762	R. C.	93	7.0	C	19 24	3.2	56 05 18.3	19.98		1.3006	8.9270 n	9.2354	9.9175
1763		91	6.5	A	19 33.66	3.112	19 27 14.6	19.98	0.00	1.3006	8.9307 n	9.5806	9.5209
1764		92	6.5	A	19 49.67	3.241	55 56 56.1	19.98	+0.02	1.3005	8.9365 n	9.2341	9.9165
1765	Gr.	64	7.1	B	0 20 27.82	3.210	49 17 37.2	+19.97		1.3004	8.9502 n	9.3332	9.8780
1766		98	6.7	A	0 21 01.11	+3.105	15 19 58.5	+19.97	0.00	1.3003	8.9618 n	9.5957	9.4205
1767		99	6.8	A	21 28.15	3.114	18 49 21.4	19.97	-0.02	1.3003	8.9710 n	9.5804	9.5062
1768		100	6.5*	B	21 30.84	3.191	43 42 10.0	19.96		1.3002	8.9713 n	9.3962	9.8375
1769		101	6.5*	A	21 32.05	3.110	17 12 01.3	19.96	+0.025	1.3002	8.9723 n	9.5874	9.4690
1770		102	6*	A	0 21 43.06	+3.107	15 45 14.3	+19.96	+0.003	1.3002	8.9760 n	9.5932	9.4318
1771	L. L.	655	6*	C	0 23 20	+3.3	59 17 11.0	+19.95		1.2999	9.0070 n	9.1278	9.9321
1772		109	6.5*	A	23 31.70	3.147	29 03 43.5	19.95	-0.064	1.2999	9.0106 n	9.5178	9.6841
1773		114	6.5	A	24 14.95	3.385	65 49 43.6	19.94	-0.02	1.2997	9.0237 n	8.9102	9.9577
1774		116	7.0	A	24 17.61	3.110	15 20 48.5	19.94	+0.014	1.2997	9.0245 n	9.5915	9.4202
1775	Gr.	74	6.7	C	0 24 29	+3.2	43 15 22.0	+19.94		1.2997	9.0260 n	9.3855	9.8334
1776		120	6*	A	0 24 47.47	+3.164	32 53 29.4	+19.93		1.2996	9.0333 n	9.4853	9.7323
1777		121	5*	A	24 53.07	3.269	53 49 54.8	19.93	-0.023	1.2996	9.0349 n	9.2968	9.9045
1778		122	7.0	A	25 06.18	3.111	15 19 54.3	19.93	-0.03	1.2996	9.0357 n	9.5905	9.4197
1779		123	7.4	C	25 19.31	3.268	53 07 29.1	19.93		1.2995	9.0424 n	9.2360	9.9004
1780	Gr.	86	7.3	C	0 25 53	+3.3	53 25 52.4	+19.92		1.2994	9.0519 n	9.2253	9.9020
1781		126	4.5*	A	0 25 54.52	+3.358	62 14 29.4	+19.92	-0.015	1.2994	9.0523 n	9.0065	9.9441
1782		130	6.5*	A	26 02.43	3.125	19 36 20.5	19.92	0.043	1.2994	9.0545 n	9.5690	9.5229
1783	O.	103	7.0	B	26 13.66	3.151	27 35 22.1	19.92	-0.02	1.2993	9.0575 n	9.5207	9.6629
1784		133	7.5	B	27 07.30	3.128	19 44 38.6	19.91	+0.038	1.2991	9.0721 n	9.5664	9.5257
1785		131	6.7*	A	0 27 08.99	+3.427	66 03 38.7	+19.91	-0.007	1.2991	9.0726 n	8.8328	9.9579
1786		139	8.3	C	0 28 15.53	+3.4	61 10 31.8	+19.91		1.2989	9.0900 n	9.0061	9.9392
1787		142	6.0	B	28 26.66	3.108	12 41 02.2	19.90		1.2988	9.0927 n	9.5978	9.3382
1788	Gr.	96	7.1	B	28 32.06	3.294	53 30 49.7	19.90	-0.03	1.2988	9.0940 n	9.1992	9.9019
1789		146	6*	A	29 11.40	3.300	53 28 45.7	19.89	-0.007	1.2986	9.1039 n	9.1935	9.9015
1790		148	6*	A	0 29 21.77	+3.362	59 38 15.0	+19.89	0.00	1.2986	9.1065 n	9.0377	9.9324
1791		149	6.5	B	0 29 26.30	+3.109	12 31 27.1	+19.89	-0.20	1.2986	9.1075 n	9.5975	9.3326
1792	O.	122	6.7*	C	29 44	3.2	26 33 57.3	19.88	-0.08	1.2985	9.1118 n	9.5188	9.6469
1793		152	6*	B	29 59.27	3.238	43 47 54.8	19.88		1.2984	9.1155 n	9.3480	9.8364
1794		153	4*	A	30 00.84	3.305	53 12 31.0	19.88	-0.02	1.2984	9.1160 n	9.1911	9.8998
1795		155	4*	A	0 30 12.41	+3.185	33 01 51.4	+19.88	+0.003	1.2984	9.1187 n	9.4656	9.7327
1796		156	6*	B	0 30 16.63	+3.117	14 32 37.3	+19.88	-0.01	1.2984	9.1197 n	9.5876	9.3961
1797		158	6*	A	30 39.84	3.195	34 42 41.7	19.87	+0.04	1.2983	9.1252 n	9.4482	9.7516
1798	Gr.	108	7.0	B	31 25.34	3.381	59 38 13.0	19.86		1.2981	9.1357 n	9.0062	9.9318
1799	L. L.	960	6.5	C	31 39	3.3	59 08 18.6	19.86		1.2980	9.1388 n	9.0167	9.9295
1800		164	4.5*	AA	0 31 57.20	+3.173	28 37 58.1	+19.86	-0.250	1.2979	9.1429 n	9.4973	9.6763
1801		165	6*	B	0 32 15.77	+3.284	48 40 01.4	+19.85		1.2978	9.1471 n	9.2587	9.8712
1802		166	3.4*	A	32 38.80	3.181	30 10 36.1	19.85	-0.086	1.2977	9.1522 n	9.4825	9.6969
1803		168	6.2	A	32 51.65	3.143	20 34 32.6	19.85	-0.373	1.2977	9.1550 n	9.5515	9.5414
1804		170	6.5*	A	33 20.86	3.144	20 45 08.4	19.84	0.027	1.2976	9.1613 n	9.5494	9.5448
1805		169	1.2* to 2.8*	AA	0 33 25.46	+3.358	55 51 05.2	+19.84	-0.045	1.2975	9.1623 n	9.0910	9.9132
1806		173	5.6*	A	0 34 20.92	+3.231	38 46 20.0	+19.83	0.00	1.2973	9.1741 n	9.3888	9.7918
1807		175	6.0	A	34 37.62	3.512	65 27 41.6	19.82	-0.02	1.2972	9.1776 n	8.6362	9.9539
1808		178	6.7*	A	34 58.26	3.161	23 56 36.3	19.82		1.2971	9.1818 n	9.5249	9.6033
1809		180	5.4*	A	35 05.92	3.312	49 49 35.8	19.82	-0.013	1.2970	9.1834 n	9.2131	9.8780
1810		181	7.0	B	0 35 13.49	+3.243	40 00 17.2	+19.82	+0.017	1.2970	9.1850 n	9.3691	9.8030
1811		182	6.7*	B	0 35 20.29	+3.400	58 04 04.5	+19.81	-0.01	1.2970	9.1863 n	8.9962	9.9236
1812	Gr.	125	7.0	C	35 38	3.3	51 39 04.9	19.81		1.2969	9.1898 n	9.1693	9.8892
1813		189	5*	A	36 33.45	3.293	46 20 25.8	19.80	-0.03	1.2966	9.2010 n	9.2664	9.8539
1814		197	6*	A	37 30.12	3.306	47 10 43.2	19.78	+0.038	1.2963	9.2119 n	9.2442	9.8595
1815		198	5*	A	0 37 45.96	3.311	47 35 59.5	+19.78	-0.003	1.2962	9.2149 n	9.2342	9.8624
1816		201	6*	B	0 38 10.44	+3.382	54 32 11.9	+19.77	-0.04	1.2961	9.2196 n	9.0668	9.9048
1817	L. L.	1210	6.7	C	39 23	3.4	58 53 26.8	19.76		1.2957	9.2330 n	8.8906	9.9261
1818		211	6.5*	A	40 00.56	3.132	14 47 35.8	19.75	-0.061	1.2955	9.2395 n	9.5742	9.4005
1819		213	5*	B	40 30.24	3.118	11 17 30.3	19.74	-0.017	1.2953	9.2451 n	9.5922	9.2850
1820		214	6*	A	0 40 37.39	+3.152	18 53 42.6	+19.74	+0.011	1.2953	9.2453 n	9.5483	9.5035

1787 = B. A. C. 142 and 1808 = B. A. C. 178. A. R. uncertain.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. a' .	Log. b' .	Log. c' .	Log. d' .
				<i>h. m. s.</i>			<i>° ' "</i>						
1821	215	4.5*	A	0 40 42.93	+3.174	-0.005	23 35 12.7	+19.74	-0.08	1.2953	9.2473 _n	9.5144	9.5953
1822	142	7.5	B	40 55.04	3.362		50 45 44.0	19.73		1.2952	9.2494 _n	9.1364	9.8821
1823	217	6.7*	A	41 17.12	3.160	+0.010	20 14 31.4	19.73	+0.016	1.2951	9.2533 _n	9.5379	9.5320
1824	218	4*	A	41 32.83	3.444	0.138	57 09 07.7	19.72	-0.483	1.2950	9.2560 _n	8.9236	9.9172
1825	219	5*	A	0 41 45.36	+3.362	+0.002	50 17 08.9	+19.72	-0.03	1.2949	9.2581 _n	9.1394	9.8788
1826	223	6.5*	B	0 42 24.60	+3.143	-0.003	16 15 55.2	+19.71	-0.198	1.2947	9.2643 _n	9.5623	9.4398
1827	224	7.5	B	42 27.56	3.202		28 02 15.8	19.71		1.2947	9.2653 _n	9.4719	9.6646
1828	226	6.5	C	42 37.47	3.283	-0.001	47 04 58.6	19.70		1.2946	9.2670 _n	9.2042	9.8572
1829	227	4.5*	A	42 55.45	3.337		40 23 52.3	19.70	-0.007	1.2945	9.2700 _n	9.3218	9.8040
1830	228	6*	A	0 43 09.42	+3.574	-0.002	63 33 58.8	+19.70	-0.027	1.2944	9.2723 _n	8.4070	9.9443
1831	229	6.5*	A	0 43 10.51	+3.199	+0.003	27 01 45.2	+19.70	-0.008	1.2944	9.2725 _n	9.4791	9.6497
1832	232	6.7	B	43 48.90	3.383	+0.018	50 49 37.0	19.69		1.2942	9.2787 _n	9.1030	9.8815
1833	235	6.7	B	44 26.44	3.388		50 53 27.2	19.68	-0.002	1.2939	9.2849 _n	9.0940	9.8816
1834	239	5.6*	A	45 37.31	3.537	-0.015	60 26 17.5	19.66	+0.16	1.2935	9.2961 _n	8.6238	9.9308
1835	244	6.5*	C	0 47 35.57	+3.517	-0.006	58 17 42.7	+19.62	-0.10	1.2927	9.3146 _n	8.7202	9.9204
1836	247	6*	A	0 47 58.25	+3.164	-0.002	18 30 36.5	+19.62	-0.012	1.2926	9.3176 _n	9.5384	9.4921
1837	245	6.5	A	47 59.52	3.380		48 00 01.0	19.62	0.04	1.2926	9.3178 _n	9.1328	9.8615
1838	250	6.0	A	48 16.60	3.199	+0.008	22 57 03.0	19.61	0.039	1.2925	9.3203 _n	9.5025	9.5813
1839	253	2*	A	49 10.66	3.565	+0.006	60 02 21.3	19.59	0.025	1.2921	9.3282 _n	8.5079	9.9276
1840	254	6.5*	B	0 49 14.30	+3.536		58 30 18.7	+19.59	-0.06	1.2921	9.3288 _n	8.6521	9.9217
1841	256	6*	A	0 49 15.35	+3.213	+0.002	26 31 52.4	+19.59	+0.015	1.2921	9.3289 _n	9.4668	9.6399
1842	255	6.3	B	49 15.83	3.559		59 41 08.4	19.59		1.2920	9.3290 _n	8.5421	9.9260
1843	258	6.5	C	49 35.74	3.139		13 16 28.8	19.58		1.2919	9.3319 _n	9.5717	9.3508
1844	259	4*	AA	49 49.10	3.295	+0.006	37 49 15.4	19.58	+0.042	1.2918	9.3338 _n	9.3233	9.7773
1845	263	7.8	B	0 50 31.23	+3.216		26 19 21.6	+19.57		1.2915	9.3393 _n	9.4653	9.6362
1846	264	4.5*	A	0 50 32.09	+3.194		22 44 32.1	+19.57	-0.049	1.2915	9.3399 _n	9.4992	9.5766
1847	261	6*	A	50 37.55	3.719		65 40 33.1	19.57	0.00	1.2915	9.3407 _n	8.3210 _n	9.9490
1848	267	6*	A	51 04.41	3.230	-0.003	28 18 56.9	19.56	-0.034	1.2913	9.3444 _n	9.4427	9.6652
1849	269	6*	A	51 21.10	3.140		13 01 11.8	19.55		1.2912	9.3467 _n	9.5714	9.3417
1850	O, 245	6.5	C	0 51 40	+3.2		20 43 42.3	+19.54	0.00	1.2910	9.3493 _n	9.5141	9.5378
1851	O, 253	6.7*	B	0 53 48.03	+3.188		20 34 30.8	+19.50	+0.03	1.2901	9.3666 _n	9.5112	9.5338
1852	O, 255	8.2	C	54 42	3.1		10 30 27.6	19.48		1.2897	9.3737 _n	9.5838	9.2484
1853	O, 258	6.5	B	54 58.46	3.216		24 37 08.7	19.48	-0.03	1.2896	9.3757 _n	9.4706	9.6071
1854	283	6.7*	B	55 53.02	3.348	-0.005	40 40 22.2	19.46	0.00	1.2891	9.3828 _n	9.2348	9.8010
1855	282	6.7*	B	0 55 55.31	+3.640		60 24 09.1	+19.45		1.2891	9.3832 _n	7.6224	9.9259
1856	285	5.6*	A	0 55 58.49	+3.266	-0.001	31 07 57.2	+19.46	-0.03	1.2891	9.3835 _n	9.3918	9.7004
1857	290	7.0	A	56 54.55	3.515	-0.014	53 32 04.2	19.44	-0.08	1.2886	9.3905 _n	8.7790	9.8918
1858	297	6.5	C	57 34.57	3.343		39 19 14.9	19.42		1.2883	9.3955 _n	9.2508	9.7850
1859	299	6.7*	B	57 38.09	3.255	+0.014	28 59 28.6	19.42	-0.12	1.2883	9.3959 _n	9.4131	9.6716
1860	298	6.9	B	0 57 50.40	+3.796	+0.001	65 18 03.4	+19.42	+0.003	1.2882	9.3974 _n	8.8351 _n	9.9444
1861	305	6*	A	0 58 29.50	+3.157	-0.001	14 16 23.3	+19.41	+0.04	1.2879	9.4022 _n	9.5543	9.3776
1862	302	6.7*	C	58 30.37	3.708		62 05 32.6	19.40		1.2879	9.4023 _n	8.3021	9.9320
1863	307	5.0	A	58 58.99	3.200	+0.003	20 48 12.1	19.39	-0.02	1.2876	9.4057 _n	9.4621	9.5389
1864	308	6.0	B	58 59.73	3.200	0.003	20 47 43.7	19.39	0.02	1.2876	9.4058 _n	9.4622	9.5357
1865	310	7.2	A	0 59 18.94	+3.281	+0.003	31 30 43.8	+19.38	-0.015	1.2874	9.4081 _n	9.3732	9.7035
1866	Gr. 241	6.7	C	0 59 56	+3.5		48 53 11.0	+19.37		1.2871	9.4126 _n	8.9569	9.8620
1867	314	5.6*	A	59 57.95	3.552	+0.388	54 18 21.3	19.37	-1.58	1.2871	9.4128 _n	8.6339	9.8946
1868	316	6*	A	59 59.14	3.146	0.001	12 17 07.2	19.37	+0.03	1.2871	9.4129 _n	9.5670	9.3129
1869	318	5*	B	1 0 50.60	3.401	0.013	43 16 31.6	19.35	-0.06	1.2867	9.4189 _n	9.1337	9.8205
1870	321	6*	B	1 1 06.51	+3.384	+0.016	31 20 39.5	+19.34	-0.045	1.2865	9.4207 _n	9.3682	9.7007
1871	322	6.5*	B	1 1 14.98	+3.200	+0.005	20 04 25.5	+19.34	-0.097	1.2865	9.4217 _n	9.5010	9.5199
1872	327	6*	A	2 13.41	3.956	+0.004	68 06 45.6	19.32	0.028	1.2860	9.4284 _n	9.0271 _n	9.9513
1873	330	4.5*	B	2 15.04	3.450	-0.005	46 34 28.3	19.32	0.012	1.2859	9.4286 _n	9.0145	9.8449
1874	Arg. 13		B	2 25.88	3.923	+0.041	67 06 43.5	19.31	0.015	1.2858	9.4298 _n	9.0013 _n	9.9481
1875	334	2.3*	AA	1 2 44.29	+3.324	+0.018	34 57 26.5	+19.31	-0.092	1.2857	9.4319 _n	9.3026	9.7416
1876	336	6.5*	B	1 3 8.37	+3.195	+0.001	18 59 27.8	+19.30	+0.02	1.2855	9.4346 _n	9.5075	9.4957
1877	337	6*	B	3 13.19	3.392	-0.013	41 24 57.7	19.29	-0.055	1.2854	9.4352 _n	9.1621	9.8038
1878	335	6*	B	3 21.71	3.802	+0.007	63 32 14.4	19.29	0.00	1.2853	9.4361 _n	8.9010 _n	9.9351
1879	339	4.5*	B	3 30.08	3.583	+0.025	54 29 03.4	19.29	-0.026	1.2853	9.4370 _n	8.4675	9.8638
1880	341	6.7*	B	3 33.86	3.169		15 00 29.5	19.29		1.2852	9.4374 _n	9.5418	9.3963
1881	338	6*	B	1 3 33.94	+3.832	-0.002	64 21 12.3	+19.29	-0.021	1.2852	9.4375 _n	8.9346 _n	9.9380
1882	343	6*	B	1 4 09.15	+3.350	-0.001	37 03 30.1	+19.27	-0.02	1.2849	9.4413 _n	9.2547	9.7628
1883	345	5.6*	B	4 13.43	3.291	+0.001	30 45 33.2	19.27	-0.01	1.2849	9.4418 _n	9.3644	9.6915
1884	O, 312	7.4	C	4 33	3.8		64 20 42.3	19.26		1.2847	9.4440 _n	8.7972 _n	9.9375
1885	348	5.4*	B	4 44.21	3.209	-0.002	20 22 10.4	19.26	+0.002	1.2846	9.4452 _n	9.4911	9.5241
1886	349	4*	A	4 46.74	3.281	+0.004	29 25 32.7	19.26		1.2846	9.4454 _n	9.3819	9.6738
1887	I, 7	7.5	B	1 4 55.99	+3.222		22 03 27.0	+19.25	-0.03	1.2845	9.4465 _n	9.4730	9.5570

(1831) 229. Middle point of the double star.

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. <i>a'</i> .	Log. <i>b'</i> .	Log. <i>c'</i> .	Log. <i>d'</i> .
				<i>h. m. s.</i>			<i>° ' "</i>						
1888	352	6.7*	B	1 5 20.10	+3.443	. . .	44 40 18.4	+19.24	. . .	1.2843	9.4491 _n	9.0447	9.8291
1889	357	7.3	A	5 57.70	3.303	. . .	31 24 41.8	19.23	. . .	1.2839	9.4530 _n	9.3471	9.6988
1890	358	6.5	A	6 06.58	3.285	. . .	29 24 04.0	19.23	-0.036	1.2838	9.4540 _n	9.3773	9.6727
1891	365	5.4*	A	6 57.77	3.242	-0.001	23 55 17.2	19.20	0.012	1.2834	9.4595 _n	9.4469	9.5892
1892	370	6*	A	1 7 29.19	+3.178	-0.003	15 28 16.4	+19.19	-0.016	1.2831	9.4627 _n	9.5325	9.4070
1893	377	7.0	C	1 9 18.65	+3.433	. . .	42 16 47.6	+19.14	. . .	1.2820	9.4740 _n	9.0-15	9.8077
1894	379	6.8	B	9 46.80	4.022	. . .	67 09 24.6	19.13	. . .	1.2817	9.4768 _n	9.1184 _n	9.9411
1895	30	7.0	C	10 05	3.2	. . .	20 23 38.4	19.12	-0.05	1.2815	9.4786 _n	9.4797	9.5215
1896	382	8.2	C	10 13.44	3.859	. . .	62 53 05.4	19.11	. . .	1.2815	9.4794 _n	8.8494 _n	9.9257
1897	Lal. 2330	6.7	C	1 11 42	+3.4	. . .	36 43 40.0	+19.08	. . .	1.2806	9.4882 _n	9.2140	9.7551
1898	390	7.9	C	1 12 00.97	+3.721	. . .	57 32 59.5	+19.07	-0.03	1.2804	9.4901 _n	8.4474 _n	9.9045
1899	391	5.6*	B	12 14.00	3.724	+0.003	57 34 25.6	19.06	+0.01	1.2802	9.4913 _n	8.4622 _n	9.9044
1900	395	4.5*	A	12 35.97	3.250	0.002	26 36 22.8	19.05	-0.004	1.2800	9.4935 _n	9.3953	9.6290
1901	394	6.7*	B	12 45.47	3.893	+0.008	64 00 06.4	19.05	-0.04	1.2799	9.4944 _n	9.0863 _n	9.9314
1902	Gr. 294	6.5	C	1 13 02	+3.5	. . .	42 51 08.6	+19.04	. . .	1.2797	9.4960 _n	9.0212	9.8101
1903	401	5*	A	1 14 12.86	+3.297	+0.003	28 05 03.4	+19.01	-0.094	1.2790	9.5027 _n	9.3674	9.6496
1904	297	6.5	C	14 22	3.6	. . .	49 27 58.0	19.01	. . .	1.2789	9.5035 _n	8.5988	9.8576
1905	Gr. 299	6.5	C	14 56	3.5	. . .	42 55 44.5	18.99	. . .	1.2785	9.5067 _n	8.9954	9.8096
1906	404	5*	A	14 59.18	3.498	+0.001	44 52 23.0	18.99	-0.003	1.2785	9.5070 _n	8.9070	9.8249
1907	409	6*	A	1 16 31.91	+3.402	+0.008	37 03 42.2	+18.95	-0.012	1.2775	9.5156 _n	9.1724	9.7564
1908	412	5*	A	1 17 07.57	+4.136	+0.011	67 28 35.6	+18.93	+0.012	1.2771	9.5188 _n	9.2148 _n	9.9405
1909	413	6.7*	A	17 07.94	3.207	0.004	17 09 58.5	18.93	-0.034	1.2771	9.5188 _n	9.5012	9.4450
1910	416	3.2*	A	17 39.22	3.828	0.040	59 35 05.0	18.91	0.05	1.2767	9.5216 _n	8.8260 _n	9.9103
1911	425	6*	B	18 57.89	3.489	+0.007	42 48 31.2	18.87	-0.06	1.2755	9.5256 _n	8.9483	9.8059
1912	427	5*	A	1 19 31.05	+3.223	-0.005	18 31 16.2	+18.86	+0.03	1.2755	9.5315 _n	9.4810	9.4753
1913	430	6.7	B	1 19 37.68	+3.232	+0.002	19 25 16.8	+18.86	-0.025	1.2754	9.5321 _n	9.4712	9.4951
1914	431	6.7*	A	19 56.69	3.225	0.002	18 35 31.4	18.85	0.042	1.2752	9.5338 _n	9.4804	9.4766
1915	432	5*	B	20 11.04	3.525	+0.033	44 45 37.4	18.84	-0.102	1.2750	9.5350 _n	8.8244	9.8205
1916	317	6.5	C	20 51	3.5	. . .	43 24 00.7	18.82	. . .	1.2746	9.5384 _n	8.8914	9.8094
1917	Gr. 439	6.7*	B	1 21 40.93	+3.209	. . .	16 25 54.4	+18.79	. . .	1.2740	9.5427 _n	9.5017	9.4231
1918	438	6.7*	A	1 21 57.44	+4.330	+0.025	69 37 12.8	+18.70	-0.086	1.2738	9.5441 _n	9.2480 _n	9.9444
1919	I, 90	6.5	C	22 30	3.3	. . .	24 37 38.9	18.77	. . .	1.2734	9.5469 _n	9.3938	9.5911
1920	441	6*	B	22 36.70	3.565	-0.001	46 21 41.7	18.76	-0.045	1.2733	9.5474 _n	8.6451	9.8307
1921	446	6*	A	23 08.11	+3.223	+0.003	17 42 31.2	+18.75	0.00	1.2729	9.5500 _n	9.4849	9.4539
1922	443	7.0	B	1 23 19.31	4.333	+0.004	69 22 27.4	18.74	-0.04	1.2728	9.5510 _n	9.2552 _n	9.9419
1923	444	7.4	B	1 23 22.55	+4.235	+0.020	67 45 54.9	+18.74	-0.10	1.2728	9.5512 _n	9.2180 _n	9.9370
1924	450	7.2	C	24 14.27	4.012	. . .	62 56 56.7	18.77	. . .	1.2721	9.5555 _n	9.0888 _n	9.9197
1925	453	4.3*	AA	24 47.74	3.198	+0.001	14 42 02.8	18.70	0.00	1.2717	9.5582 _n	9.5158	9.3740
1926	454	6.7*	C	25 06.27	3.159	. . .	10 14 37.9	18.69	. . .	1.2715	9.5597 _n	9.5592	9.2194
1927	455	7.0	A	1 25 19.08	+3.213	+0.007	16 18 32.8	+18.68	-0.275	1.2713	9.5608 _n	9.4973	9.4176
1928	F. 242	6.8	B	1 25 34.15	+4.297	-0.077	68 18 03.9	+18.67	+0.100	1.2712	9.5620 _n	9.2515 _n	9.9371
1929	456	5.6*	C	25 46.64	3.772	-0.004	58 35 22.3	18.66	. . .	1.2710	9.5630 _n	8.9339 _n	9.9000
1930	459	8.2	B	25 55.63	3.168	. . .	11 14 20.0	18.66	. . .	1.2709	9.5637 _n	9.5492	9.2585
1931	465	6*	A	27 03.87	3.439	. . .	36 35 44.2	18.62	. . .	1.2700	9.5692 _n	9.1048	9.7432
1932	469	6.7*	A	1 28 03.55	+3.232	+0.010	17 49 16.9	+18.59	-0.099	1.2693	9.5739 _n	9.4747	9.4529
1933	470	6.8	A	1 28 13.16	+3.177	-0.003	11 55 04.8	+18.59	0.00	1.2692	9.5746 _n	9.5403	9.2820
1934	474	6.4	B	28 49.27	3.634	-0.001	48 05 00.8	18.57	. . .	1.2687	9.5774 _n	7.9367	9.8382
1935	476	6.7*	A	29 05.56	3.198	+0.001	14 01 17.7	18.56	0.00	1.2685	9.5787 _n	9.5174	9.3507
1936	477	6*	B	29 08.86	3.224	. . .	16 47 34.6	18.55	. . .	1.2685	9.5789 _n	9.4855	9.4271
1937	480	4*	B	1 29 27.92	+3.510	-0.015	40 46 46.7	+18.54	-0.37	1.2682	9.5804 _n	8.9031	9.7811
1938	482	6*	B	1 29 58.15	+3.869	. . .	57 20 22.7	+18.53	. . .	1.2678	9.5827 _n	8.9441 _n	9.9809
1939	487	4.3*	AA	30 19.61	3.641	+0.006	47 59 34.4	18.52	-0.118	1.2675	9.5843 _n	7.7009	9.8364
1940	488	6.5*	A	30 28.38	3.174	-0.005	11 30 05.3	18.51	+0.046	1.2674	9.5850 _n	9.5422	9.2650
1941	490	7.5	B	31 01.82	3.176	+0.011	11 26 24.0	18.49	-0.013	1.2670	9.5875 _n	9.5423	9.2622
1942	492	6.5*	A	1 31 51.57	+3.570	-0.001	43 44 57.3	+18.46	-0.002	1.2663	9.5912 _n	8.6398	9.8039
1943	Gr. 357	7.0	C	1 32 17	+3.8	. . .	53 13 59.2	+18.45	. . .	1.2660	9.5931 _n	8.7344 _n	9.8675
1944	P. 263	7.4	B	32 20.42	4.264	+0.113	66 17 02.8	18.45	-0.257	1.2659	9.5934 _n	9.2659 _n	9.9254
1945	495	6.8	B	32 31.14	3.222	-0.002	15 59 25.2	18.44	-0.02	1.2658	9.5942 _n	9.4898	9.4037
1946	496	7.5	A	32 33.66	3.199	+0.004	13 39 02.4	18.44	-0.02	1.2657	9.5944 _n	9.5170	9.3365
1947	500	6.7*	A	1 32 56.23	+3.220	+0.003	15 46 15.0	+18.43	-0.006	1.2654	9.5960 _n	9.4918	9.3975
1948	498	6*	A	1 33 06.37	+4.341	+0.001	67 24 34.6	+18.42	-0.014	1.2653	9.5968 _n	9.2970 _n	9.9285
1949	501	6*	C	33 09.99	3.558	. . .	42 39 53.1	18.42	. . .	1.2652	9.5970 _n	8.7129	9.7941
1950	502	5.6*	A	33 12.46	3.514	. . .	39 56 35.4	18.42	-0.02	1.2652	9.5972 _n	8.8959	9.7706
1951	499	6.7*	A	33 16.04	4.523	+0.010	69 59 23.1	18.42	-0.021	1.2652	9.5975 _n	9.3492 _n	9.9360
1952	508	6.8	C	34 01.32	3.924	0.010	57 59 41.3	18.39	. . .	1.2645	9.6008 _n	9.0345 _n	9.8908
1953	510	6.5*	A	1 34 10.82	+3.552	+0.074	41 59 07.3	+18.38	-0.122	1.2644	9.6014 _n	8.7428	9.7877

Cat. No.	Number and Catalogue.	Mag.	Class.	Right ascension, 1875.0.	Annual precession.	Proper motion.	Declination, 1875.0.	Annual precession.	Proper motion.	Log. α' .	Log. δ' .	Log. ϵ' .	Log. δ' .
				<i>h. m. s.</i>			<i>° ' "</i>						
1954	I, 509	7.0	C	1 34 11.04	+3.993	-	59 54 55.4	+18.38	-0.04	1.2644	9.6015 _n	9.1078 _n	9.8994
1955	145	6.0	C	34 20	3.3	-	25 06 48.6	18.38	0.04	1.2643	9.6022 _n	9.3484	9.5899
1956	514	6*	A	34 35.57	3.373	-	29 24 50.5	18.37	-0.018	1.2641	9.6033 _n	9.2576	9.6611
1957	516	6*	A	34 50.19	3.442	-	34 36 50.7	18.36	-	1.2639	9.6043 _n	9.1096	9.7160
1958	515	6*	B	1 34 53.14	+3.999	+0.008	59 55 10.9	+18.36	-0.043	1.2638	9.6045 _n	9.1160 _n	9.8989
1959	519	7.5	B	1 35 3.03	+3.368	-	28 52 23.4	+18.35	-0.03	1.2637	9.6052 _n	9.2681	9.6454
1960	523	5.6*	B	35 42.80	3.265	-0.020	19 39 36.1	18.33	-0.66	1.2631	9.6081 _n	9.4348	9.4879
1961	524	7.8	B	35 43.08	3.218	-	15 08 48.1	18.33	-	1.2631	9.6081 _n	9.4954	9.3781
1962	522	4*	A	35 50.07	3.719	+0.006	50 03 28.8	18.32	0.027	1.2630	9.6086 _n	8.5156 _n	9.8455
1963	525	6.4	A	1 36 3.25	+3.905	-	56 54 25.5	+18.32	-0.04	1.2628	9.6095 _n	9.0171 _n	9.8838
1964	Gr. 374	6.8	C	1 36 49	+3.6	-	45 30 39.6	+18.29	-	1.2622	9.6128 _n	8.0629	9.8134
1965	533	6.7*	B	38 6.21	3.267	-0.006	19 27 29.6	18.24	-0.09	1.2611	9.6182 _n	9.4327	9.4815
1966	535	6.7*	A	38 43.72	4.178	+0.088	63 14 03.4	18.22	0.258	1.2606	9.6207 _n	9.2491 _n	9.9092
1967	538	6*	B	39 48.11	3.241	-0.001	16 47 09.1	18.18	-	1.2596	9.6251 _n	9.4677	9.4180
1968	540	6.7*	B	1 40 8.00	+3.649	-	45 36 20.7	+18.17	-0.08	1.2593	9.6265 _n	7.0715	9.8112
1969	542	6.8	C	1 40 31.28	+3.173	-	10 13 07.9	+18.15	-	1.2590	9.6280 _n	9.5461	9.2058
1970	544	6.0	B	41 16.56	3.507	+0.010	37 19 46.5	18.13	-	1.2583	9.6311 _n	8.9329	9.7389
1971	546	6.5*	A	41 24.26	3.239	+0.004	16 19 56.6	18.12	-0.008	1.2582	9.6316 _n	9.4713	9.4050
1972	547	6*	B	41 30.41	3.692	-	47 16 24.3	18.12	-	1.2581	9.6320 _n	8.3101 _n	9.8220
1973	549	6.0	A	1 41 34.66	+3.240	-0.004	16 23 48.2	+18.12	+0.051	1.2580	9.6323 _n	9.4701	9.4066
1974	555	6.7*	B	1 42 57.39	+3.796	-	51 18 58.0	+18.06	-0.10	1.2568	9.6378 _n	8.8313 _n	9.8471
1975	556	6*	A	43 14.32	3.302	-	21 39 13.0	18.05	-	1.2565	9.6389 _n	9.3849	9.5214
1976	558	6*	C	43 47.33	3.892	+0.002	54 31 38.4	18.03	-	1.2560	9.6410 _n	9.0193 _n	9.8647
1977	560	6*	C	44 12.88	3.775	+0.001	50 10 26.1	18.01	-0.043	1.2556	9.6427 _n	8.7740 _n	9.8388
1978	561	6*	A	1 44 14.03	+3.179	-0.006	10 25 24.5	+18.02	-0.04	1.2556	9.6428 _n	9.5406	9.2109
1979	562	6.7*	A	1 44 51.79	+3.795	-0.002	50 51 22.2	+17.99	0.00	1.2550	9.6452 _n	8.8368 _n	9.8425
1980	I, 191	7.7	C	45 24	3.2	-	10 11 31.4	17.97	-	1.2545	9.6472 _n	9.5422	9.2002
1981	564	3.4*	A	45 25.30	4.239	+0.057	63 03 11.5	17.97	-0.022	1.2545	9.6473 _n	9.2991 _n	9.9024
1982	566	6*	A	45 47.80	3.572	-0.002	40 06 42.6	17.95	0.012	1.2541	9.6488 _n	8.6519	9.7611
1983	569	4.3*	A	1 45 57.56	+3.401	-0.002	28 58 08.3	+17.95	-0.235	1.2540	9.6494 _n	9.2137	9.6370
1984	568	5*	A	1 46 18.95	+4.556	-0.002	68 04 11.6	+17.94	-0.01	1.2537	9.6507 _n	9.4031 _n	9.9189
1985	572	4.3*	A	46 40.36	3.274	+0.005	18 40 48.2	17.92	0.10	1.2533	9.6521 _n	9.4269	9.4567
1986	573	4.3*	A	46 40.36	3.274	+0.005	18 40 56.8	17.92	-0.10	1.2533	9.6521 _n	9.4269	9.4567
1987	Gr. 400	7.0	C	47 08	3.6	-	40 02 24.1	17.90	-	1.2529	9.6538 _n	8.6264	9.7592
1988	575	6.0	C	1 47 22.90	+3.579	-0.001	40 05 19.5	+17.89	-0.05	1.2526	9.6548 _n	8.6136	9.7594
1989	576	6.4	A	1 47 34.71	+3.519	-	36 30 47.9	+17.88	-	1.2524	9.6555 _n	8.9008	9.7248
1990	577	3*	AA	47 44.23	3.294	+0.007	20 11 46.3	17.88	0.107	1.2523	9.6563 _n	9.4017	9.4882
1991	579	5.8	A	48 31.00	3.525	0.002	36 39 50.1	17.84	-0.002	1.2515	9.6590 _n	8.8795	9.7254
1992	580	5.8	A	48 44.01	3.525	+0.014	36 38 15.5	17.84	+0.01	1.2513	9.6598 _n	8.8782	9.7249
1993	581	6*	A	1 48 52.90	+3.330	-0.001	22 57 49.1	+17.84	-0.007	1.2512	9.6603 _n	9.3445	9.5402
1994	L. L. 3536	7.0	C	1 49 36	+4.0	-	59 00 53.7	+17.80	-	1.2505	9.6630 _n	9.2334 _n	9.8814
1995	Ll. 3533	6.6	C	49 42	4.1	-	61 05 11.7	17.80	-	1.2504	9.6633 _n	9.2864 _n	9.8904
1996	587	6.8	C	50 10.03	3.722	-	46 29 02.6	17.78	-	1.2499	9.6550 _n	8.5630 _n	9.8082
1997	588	6.7*	B	50 25.97	4.342	-	64 00 43.3	17.77	0.00	1.2497	9.6660 _n	9.3550 _n	9.9012
1998	592	6.5*	A	1 50 31.42	+3.263	+0.003	17 12 23.1	+17.76	-0.016	1.2496	9.6663 _n	9.4429	9.4184
1999	590	6*	C	1 50 37.54	+3.775	+0.002	48 35 30.6	+17.76	+0.005	1.2495	9.6667 _n	8.7865 _n	9.8224
2000	I, 213	6.7*	C	50 38	3.4	-	27 11 41.1	17.76	-0.07	1.2495	9.6667 _n	9.2400	9.6072
2001	593	5*	A	50 57.93	3.335	-0.009	22 59 06.9	17.75	-0.027	1.2491	9.6679 _n	9.3378	9.5386
2002	Ll. 3606	7.0	C	52 01	4.1	-	59 21 08.4	17.71	-	1.2481	9.6717 _n	9.2619 _n	9.8806
2003	607	6.7*	B	1 52 39.52	+3.306	+0.010	20 27 02.5	+17.68	-	1.2474	9.6740 _n	9.3832	9.4886
2004	609	6*	A	1 52 44.48	+3.202	-	11 41 14.3	+17.68	-0.05	1.2473	9.6742 _n	9.5175	9.2518
2005	610	6*	A	53 35.08	4.391	+0.003	64 17 47.6	17.64	0.014	1.2465	9.6772 _n	9.3808 _n	9.8991
2006	611	6.7*	B	53 46.24	4.364	-0.002	63 47 06.1	17.63	0.00	1.2463	9.6779 _n	9.3722 _n	9.8970
2007	614	5*	C	53 59.26	3.945	+0.003	53 52 54.6	17.63	0.026	1.2461	9.6786 _n	9.1127 _n	9.8512
2008	620	6.5	B	1 55 17.46	+4.422	-	64 30 04.7	+17.57	-0.07	1.2447	9.6831 _n	9.3950 _n	9.8980
2009	624	6.5*	B	1 55 40.14	+3.486	+0.003	32 40 49.8	+17.55	-0.014	1.2443	9.6844 _n	9.0175	9.6745
2010	628	2.3*	AA	56 13.88	3.650	+0.001	41 43 43.5	17.53	-0.05	1.2437	9.6864 _n	6.7236	9.7648
2011	629	7.0	C	56 17.49	3.191	-	10 24 56.0	17.53	-	1.2437	9.6865 _n	9.5301	9.1987
2012	630	6*	A	56 33.85	3.379	+0.011	25 19 55.3	17.52	+0.004	1.2434	9.6875 _n	9.2644	9.5725
2013	632	6.7*	A	1 56 51.42	+3.279	-	17 39 06.0	+17.50	-	1.2431	9.6885 _n	9.4240	9.4227
2014	637	6.0	A	1 57 16.33	+3.380	-	25 19 06.6	+17.48	-0.03	1.2426	9.6899 _n	9.2620	9.5716
2015	644	6.5*	A	59 34.38	3.341	+0.004	22 03 05.1	17.38	-0.040	1.2402	9.6976 _n	9.3325	9.5125
2016	645	7.2	A	59 37.63	3.385	-	25 13 59.4	17.38	-	1.2401	9.6977 _n	9.2551	9.5677
2017	647	6.7*	A	59 44.19	3.384	-0.001	25 06 26.4	17.38	-0.017	1.2400	9.6981 _n	9.2580	9.5655
2018	646	6.5	C	1 59 57.72	+4.133	-0.005	57 49 38.4	+17.37	-0.02	1.2397	9.6988 _n	9.2834 _n	9.8652

(1985) B. A. C. 572. The right ascension refers to the middle point between 572 and 573.

DETAILS OF POSITIONS—DIVISION I.

BRITISH ASSOCIATION CATALOGUE STARS.

DECLINATION $+10^{\circ}$ TO 20° .

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
4079	Tayl. - - - - -	12	0	48.03	10	21	33.9	I have used P. M. + 0".025, which represents Piazzini within +1".0 and Lalande to +0".1 [C - O]. Both A. R. and decl. are rather uncertain.
	Arm. - - - - -			47.80			34.7	
	Q. - - - - -			47.63 ₂			32.0 ₁	
	Main - - - - -			47.62			32.1 ₂	
	Ad. - - - - -			47.77			33.1	
4081	Yarn. - - - - -	12	1	12.80 ₂	14	12	45.9	P. M. assumed zero.
	Q. - - - - -			12.81			45.3	
	Kbg. - - - - -			12.64 ₁			44.3 ₁	
	Main - - - - -			12.69			44.2	
	Ad. - - - - -			12.74			45.0	
4099	Mädl. - - - - -	12	4	[9.91]	17	30	19.0	Mädler's P. M. in A. R. has been omitted and his A. R. excluded.
	Arm. - - - - -			9.26			19.4	
	Ay. 64 - - - - -			9.29			17.7	
	Wu. 67 - - - - -			9.33			18.4	
	Main - - - - -			9.30			18.8	
	Ay. 72 - - - - -			9.22 ₂			18.7 ₃	
	Ad. - - - - -			9.29			18.6	
4114	Mädl. - - - - -	12	7	4.04	10	57	28.6	
	Arm. - - - - -			3.93			29.6	
	Q. - - - - -			3.97			27.3 ₂	
	Ay. 64 - - - - -			4.00			29.1	
	Main - - - - -			4.12			28.2	
	Yarn. - - - - -			4.00			28.3 ₃	
	Ad. - - - - -			4.01			28.6	
4125	Mädl. - - - - -	12	9	39.27	15	35	43.0	
	Arm. - - - - -			39.23			42.7	
	Ay. 60 - - - - -			39.31			42.5 ₉	
	Q. - - - - -			39.27			41.9 ₂	
	Ad. - - - - -			39.27			42.4	
4156	Mädl. - - - - -	12	14	24.03	18	29	2.4	
	Arm. - - - - -			24.08			2.4	
	Ay. 60 - - - - -			24.03			1.7	
	Q. - - - - -			23.91 ₁	28		59.6 ₃	
	Ad. - - - - -			24.03	29		1.4	
4218	Strn. P. M. - - - - -	12	24	12.66	10	24	31.4	P. M. in decl. used - 0".055 C - O (Lal.) = + 0".5, 2 obs.
	Arm. - - - - -			12.58 ₃			31.6	
	Q. - - - - -			12.76 ₂			29.9 ₃	
	Main - - - - -			12.66			31.4	
	Ad. - - - - -			12.66			31.1	
4228	Mädl. - - - - -	12	26	43.29	10	59	[5.0]	Mädler is manifestly in error. Taylor gives 8".1 with the adopted P. M. - 0".007.
	Arm. - - - - -			43.17			7.2	
	Schj. - - - - -			43.21 ₃			8.7 ₃	
	Ay. 64 - - - - -			43.25			7.5	
	Main - - - - -			43.25			8.5	
	Ad. - - - - -			43.24			8.0	
4242	St. - - - - -	12	28	51.62	19	3	55.5	St. and Pulc. have each received double weight.
	Yarn. - - - - -			51.51			55.1	
	Main - - - - -			51.63			55.5	
	Pulc. - - - - -			51.52			55.8	
	Ad. - - - - -			51.58			55.5	
4248	Mädl. - - - - -	12	30	42.20	17	46	42.7	
	Arm. - - - - -			42.26			43.4	
	Ay. 64 - - - - -			42.25			42.6	
	Main - - - - -			42.20			43.0	
	Ad. - - - - -			42.23			43.0	
4267	Mädl. - - - - -	12	35	16.44	11	6	43.8	
	Arm. - - - - -			16.24			44.1	
	Ay. 64 - - - - -			16.46			45.0	
	Main - - - - -			16.50			45.1	
	Ad. - - - - -			16.41			44.7	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
4271	Müdl. - - - - -	12	35	33.37	10	55	28.8	The observations since Arm. are very numerous. Weights for Ay. 60 and Main, 1½; for Ay. 64, 2.
	Arm. - - - - -			33.42			29.6	
	Ay. 60 - - - - -			33.41			30.7	
	Ay. 64 - - - - -			33.46			29.3	
	Main - - - - -			33.44			29.9	
	Ay. 70 - - - - -			33.44			29.3	
	Ad. - - - - -			33.43			29.8	
4288	Müdl. - - - - -	12	40	1.61	10	14	19.0	
	Arm. - - - - -			1.38			20.6	
	Q. - - - - -			1.50 ₁₃			20.8 ₉	
	RC ₂ - - - - -			1.39 ₁₀			20.6	
	Ay. 60 - - - - -			1.47			21.2	
	Ad. - - - - -			1.47			20.8	
4290	Rüm. - - - - -	12	40	23.95	17	15	36.7	Double weight given to Ay. 60. Piazzì gives decl. 1875.0 = 37".8.
	Arm. - - - - -			23.97			32.4	
	Ay. 60 - - - - -			24.05			38.6	
	Ad. - - - - -			23.99			38.1	
4292	Müdl. - - - - -	12	40	55.95	12	38	29.5	
	Arm. - - - - -			55.92			31.1	
	Q. - - - - -			56.01			30.5 ₂	
	Ay. 64 - - - - -			56.07			30.9	
	Main - - - - -			56.06			30.6	
	Ad. - - - - -			56.00			30.8	
4299	Müdl. - - - - -	12	41	58.54	14	14	14.5	
	Arm. - - - - -			58.65			14.1	
	Yarn. - - - - -			58.66 ₁₄			11.7	
	Ay. 64 - - - - -			58.67			11.8	
	Main - - - - -			58.62			12.1	
	Ad. - - - - -			58.63			12.4	
4301	Müdl. - - - - -	12	42	38.43	14	48	21.6	
	Arm. - - - - -			38.24			20.8	
	Yarn. - - - - -			38.30 ₁₂			19.0	
	Ay. 60 - - - - -			38.32			19.6 ₂	
	Q. - - - - -			38.35			18.9 ₂	
	Ay. 64 - - - - -			38.32			19.2	
	Main - - - - -			38.34			21.7	
	Ad. - - - - -			38.33			19.9	
4318	Müdl. - - - - -	12	45	59.18	17	45	16.5	
	Arm. - - - - -			59.28			17.4	
	Q. - - - - -			59.24 ₂			15.0	
	RC ₂ - - - - -			59.23			15.1	
	Ay. 64 - - - - -			59.24			16.2	
	Ad. - - - - -			59.23			16.0	
4319	Müdl. - - - - -	12	46	9.82	17	47	23.1	
	Arm. - - - - -			[9.93]			23.2	
	Q. - - - - -			9.52 ₂			21.3	
	RC ₂ - - - - -			9.71			22.2	
	Ay. 64 - - - - -			9.65			22.5	
	Ad. - - - - -			9.69			22.3	
4329	Müdl. - - - - -	12	47	33.58	13	5	54.9	
	Arm. - - - - -			33.17			54.8	
	Ay. 64 - - - - -			33.35			53.7	
	Main - - - - -			33.35			53.9	
	Ay. 73 - - - - -			33.24 ₁			55.4 ₁	
	Ad. - - - - -			33.35			54.4	
4351	Müdl. - - - - -	12	52	44.41	18	5	2.1	
	Arm. - - - - -			44.49			1.8	
	Ay. 60 - - - - -			44.50			2.0	
	Ay. 72 - - - - -			44.53			1.6	
	Ad. - - - - -			44.51			1.8	
4362	Müdl. - - - - -	12	54	58.77	17	47	53.3	
	Q. - - - - -			58.80			50.8	
	Ay. 64 - - - - -			58.74			52.2	
	Main - - - - -			58.74			51.7	
	Ad. - - - - -			58.76			51.6	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
4367	St. - - - - -	12	55	57.23	11	37	53.5	Very frequently observed at Greenwich and Oxford. Weights for Ay. 64 and Main, 14; for Ay. 70, 2.
	Langier - - - - -						53.7	
	Arm. - - - - -			57.43			52.5	
	Yarn. - - - - -			57.27			52.9	
	Ay. 64 - - - - -			57.26			53.4	
	Main 65 - - - - -			57.24			53.4	
	Main 70 - - - - -			57.27			53.2	
	Ay. 70 - - - - -			57.26			53.7	
	Ad. - - - - -			57.28			53.3	
4403	Arm. - - - - -	13	3	39.22 ₁	17	30	58.3 ₂	Piazzi's decl. reduced to 1875.0 is 57''.6. I have assumed no P. M.
	Q. - - - - -			39.04 ₂			55.8 ₂	
	Ay. 64 - - - - -			39.13			57.3	
	Ay. 68 - - - - -			39.19			57.4 ₂	
	Main - - - - -			39.18			57.1	
	Ad. - - - - -			39.15			57.2	
4406	Mädl. - - - - -	13	3	54.40	18	11	28.6	The position Ay. is combined from the catalogues for 1860 (1 obs.) and 1864 (6 obs.) and 1 obs. in 1872.
	Q. - - - - -			54.27 ₂			27.9	
	RC ₂ - - - - -			54.38			27.3	
	Ay. - - - - -			54.37			28.3	
	Ad. - - - - -			54.36			28.1	
4423	Arm. - - - - -	13	6	19.75	12	13	17.8 ₂	Pi. reduced to 1875.0 (without P. M.) gives 17''.5.
	Yarn. - - - - -			19.69 ₂			18.5	
	Ay. 60 - - - - -			19.59			17.9 ₂	
	Main - - - - -			19.88 ₂			17.1 ₂	
	Ad. - - - - -			19.72			17.9	
4440	Mädl. - - - - -	13	10	34.36	10	4	41.1	
	Q. - - - - -			34.20			39.8	
	RC ₂ - - - - -			34.22			39.7	
	Ay. 60 - - - - -			34.29			41.0	
	Ay. 64 - - - - -			34.29			40.7	
	Yarn. - - - - -			34.40 ₁			39.7 ₂	
	Ad. - - - - -			34.28			40.2	
4444	Arm. - - - - -	13	11	4.56	14	20	4.1	P. M. +0''.05 gives C—O Lal. +0''.3, Pi. +0''.1, Tayl. +0''.3.
	Q. - - - - -			4.64 ₂			2.2 ₂	
	Ay. 64 - - - - -			4.61			3.3	
	Wn. 67 - - - - -			4.67 ₂			3.9	
	Main - - - - -			4.70			3.0	
	Ad. - - - - -			4.63			3.4	
4448	Q. - - - - -	13	11	27.94 ₂	14	25	21.2	I have used P. M. +0''.03 C—O Pi. 0''.0, Lal. +1''.6, Tayl. -0''.4.
	Wn. 67 - - - - -			27.97 ₂			23.9 ₂	
	Main - - - - -						21.7 ₁	
	Ad. - - - - -			27.96			22.2	
4468	Jac. - - - - -	13	15	12.52	14	48	21.1	
	Yarn. - - - - -			12.64 ₂			20.0	
	Ay. 60 - - - - -			12.62			20.6 ₂	
	Q. - - - - -			12.64			20.4	
	Smyth - - - - -			12.75			20.9 ₂	
	Ad. - - - - -			12.63			20.6	
4199	Mädl. - - - - -	13	22	19.03	14	26	49.3	
	Arm. - - - - -			19.03			[55.4]	
	RC ₂ - - - - -			18.92			48.8 ₂	
	Ay. 60 - - - - -			19.11 ₂			49.1	
	Q. - - - - -			18.92			47.9	
	Ay. 64 - - - - -			18.95			50.3	
	Ay. 70 - - - - -			18.91			50.2 ₁	
	Ad. - - - - -			18.99			49.5	
4504	Mädl. - - - - -	13	23	1.46	11	28	2.2	
	Ay. 64 - - - - -			1.43			1.8	
	Yarn. - - - - -			1.47			2.0	
	Main - - - - -			1.41			1.6	
	Wn. 67 - - - - -			1.45 ₂			2.1 ₂	
	Ad. - - - - -			1.44			1.9	
4509	Tayl. - - - - -	13	23	58.24	19	42	17.2	I have used P. M. +0''.09 in decl., which gives C—O (P.) -0''.3.
	Rümik. - - - - -			58.44 ₂			15.5 ₂	
	Q. 65 - - - - -						16.3 ₂	
	Ad. - - - - -			58.32			16.6	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
4559	Jac. - - - - -	13	33	24.83	11	22	55.8	
	Ay. 60 - - - - -			24.87 ₂			54.9	
	Main - - - - -			24.90			54.7	
	Smyth - - - - -			24.96			55.2	
	Ad. - - - - -			24.91			55.2	
4597	St. - - - - -	13	41	19.36	18	4	50.4	Weights: 2 to Ay. 64, 1½ to Ay. 70, A. R., and Main. Observations very numerous.
	Arm. - - - - -			19.41			49.6	
	Yarn. - - - - -			19.38 ₂			51.5 ₂	
	Ay. 64 - - - - -			19.35			50.2	
	Main 65 - - - - -			19.40			50.7	
	Ay. 70 - - - - -			19.32			50.4	
	Main 70 - - - - -			19.34			50.7	
	Ad. - - - - -			19.36			50.5	
4615	Mädl. - - - - -	13	43	26.83	16	25	6.9	
	Arm. - - - - -			26.82			8.2	
	Ay. 50 - - - - -			26.88			7.1	
	Yarn. - - - - -			26.95			7.1	
	Ay. 72 - - - - -			26.86 ₂			7.8	
	Ad. - - - - -			26.87			7.5	
4621	Jac. - - - - -	13	44	8.20	19	15	5.2	
	Ay. 60 - - - - -			8.31 ₂			5.3 ₂	
	Main - - - - -			8.40			4.0	
	Smyth - - - - -			8.40			4.7	
	Ad. - - - - -			8.33			4.8	
4634	Ay. 60 - - - - -	13	46	32.24	17	20	52.8	Seconds of decl. for 1875.0: D'Ag., 56.0, 2 obs.; Lal., 52.5, 1 obs.; Piazz, 52.3, 13 obs.
	RC ₂ - - - - -			32.16			52.4	
	Ay. 64 - - - - -			32.14			52.6	
	Ay. 70 - - - - -			32.17 ₂			51.8	
	Ad. - - - - -			32.18			52.4	
4637	Mädl. - - - - -	13	47	14.56	18	32	59.0	
	Arm. - - - - -			14.58			60.2	
	Ay. 64 - - - - -			14.56			58.6	
	Main - - - - -			14.65			59.6	
	Ad. - - - - -			14.59			59.3	
4648	St. - - - - -	13	48	43.96	19	1	30.7	Authorities after RC ₂ . all have double weight.
	Langier - - - - -						30.3	
	RC ₂ - - - - -			44.00			29.7	
	Yarn. - - - - -			43.97			30.9	
	Ay. 64 - - - - -			43.97			30.4	
	Main 65 - - - - -			43.97			30.8	
	Main 70 - - - - -			43.95			29.9	
	Ay. 70 - - - - -			43.96			30.1	
	Wu. 70 (67) - - - - -						30.6	
	Arg. - - - - -			43.96			30.9	
	Eng. - - - - -			44.02			31.0	
	Ad. - - - - -			43.97			30.5	
4662	Tayl. - - - - -	13	52	38.14	15	15	39.1	P. M. in decl. - 0''.05 gives C-O for Pi. - 0''.7, for Lal. + 0''.4. There may also be P. M. in A. R.
	Arm. - - - - -			37.95			38.5	
	Ay. 64 - - - - -			37.81			38.7	
	Main - - - - -			37.84			39.3	
	Ad. - - - - -			37.82			38.4	
4721	Mädl. - - - - -	14	8	4.60	13	32	48.4	
	Arm. - - - - -			4.58 ₁			46.2 ₂	
	Yarn. - - - - -			4.55 ₂			47.2	
	RC ₂ - - - - -			4.65 ₂			47.0 ₁	
	Kbg. - - - - -			4.69 ₁			46.9 ₁	
	Ay. 64 and 72 - - - - -			4.49			48.5	
	Ad. - - - - -			4.55			47.6	
4724	Mädl. - - - - -	14	8	43.73	10	41	24.7	
	Arm. - - - - -			43.72 ₂			23.8	
	RC ₂ - - - - -			43.68 ₂			25.6 ₁	
	Kbg. - - - - -			43.78 ₁			26.6 ₁	
	Schj. - - - - -			43.43 ₁			26.1 ₁	
	Ay. 64 - - - - -			43.63			25.1	
	Ad. - - - - -			43.67			25.1	

No.	Authority.	Right ascension.	Declination.	Remarks.
4729	St. - - - - -	<i>h. m. s.</i> 14 9 57.60	° ' " 19 50 3.5	
	Yarn. - - - - -	57.60	3.3	
	Ay. 60 - - - - -	57.63	3.1	
	Ay. 64 - - - - -	57.59	3.4	
	Gyld. - - - - -	-	2.7	
	Main 65 - - - - -	57.63	2.5	
	Wn. 70 - - - - -	57.64	2.9	
	Main 70 - - - - -	57.63	2.8	
	Leiden - - - - -	-	3.5	
	Ad. - - - - -	57.61	3.1	
4731	Mädl. - - - - -	14 10 11.57	19 29 42.8	
	Arm. - - - - -	[11.23]	41.5	
	Yarn. - - - - -	11.56 ₂	39.2	
	RC ₂ . - - - - -	11.63	41.8	
	Ay. 64 - - - - -	11.55	41.2	
	Ad. - - - - -	11.58	40.9	
4737	Ay. 40 - - - - -	14 11 29.80	15 50 33.1	A. R. quite uncertain.
	Jac. - - - - -	29.52	33.8	
	Smyth - - - - -	30.02	33.5	
	Ad. - - - - -	29.78	33.5	
4751	Mädl. - - - - -	14 13 13.42	13 34 56.6	
	Arm. - - - - -	13.46	55.1	
	Yarn. - - - - -	13.39 ₂	54.5	
	RC ₂ . - - - - -	13.26	54.0	
	Q. - - - - -	13.21 ₁	54.8	
	Kbg. - - - - -	13.35 ₂	56.3 ₂	
	Schj. - - - - -	13.01 ₁	56.0 ₁	
	Ad. - - - - -	13.33	55.0	
4753	Mädl. - - - - -	14 13 50.26	16 52 51.7	
	Arm. - - - - -	50.36	50.1	
	RC ₂ . - - - - -	50.22	50.6	
	Kbg. - - - - -	50.23 ₂	50.6 ₂	
	Q. - - - - -	50.32 ₁	49.9 ₂	
	Ay. 64 - - - - -	50.33	49.6	
	Wn. 67 - - - - -	50.34	49.2	
	Ay. 73 - - - - -	50.20 ₁	50.7	
	Ad. - - - - -	50.29	50.1	
4785	Mädl. - - - - -	14 20 38.64	19 47 23.4	Authorities since RC ₂ . have weight = 1 $\frac{1}{2}$. Observations are very numerous.
	Arm. - - - - -	38.68	24.6	
	RC ₂ . - - - - -	38.48	24.8 ₂	
	Ay. 60 - - - - -	38.54	24.4	
	Ay. 64 - - - - -	38.54	23.7	
	Main 65 - - - - -	38.58	24.2	
	Main 70 - - - - -	38.59	23.9	
	Ay. 70 - - - - -	38.53	24.1	
	Ad. - - - - -	38.57	24.1	
4846	Arm. - - - - -	14 34 43.60	14 4 21.8	The older authorities do not agree well. I have assumed P. M. = 0.
	Ay. 50 - - - - -	43.76	23.2	
	Kbg. - - - - -	43.93	21.2	
	Ay. 64 - - - - -	43.77	22.6 ₂	
	Q. - - - - -	43.70	20.5 ₂	
	Ad. - - - - -	43.75	21.9	
4847	St. - - - - -	14 34 51.08	16 57 18.8	
	Arm. - - - - -	51.04	19.0	
	Kbg. - - - - -	50.98	18.2	
	RC ₂ . - - - - -	51.09	19.4	
	Yarn. - - - - -	51.12 ₂	19.2 ₂	
	Main - - - - -	50.97	19.2	
	Ad. - - - - -	51.05	18.9	
4849	St. - - - - -	14 35 10.79	14 15 55.9	
	Laugier - - - - -	-	57.6	
	Yarn. - - - - -	10.83 ₁	54.3 ₂	
	Main - - - - -	10.80	56.7 ₁₂	
	Ay. 72 - - - - -	10.76	56.1	
	Ad. - - - - -	10.79	56.2	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>c</i>	<i>'</i>	<i>"</i>	
4853	Mädl. - - - - -	14	35	43.20	12	12	1.3	
	Ay. 40-45 - - - - -			43.18			1.8	
	Arm. - - - - -			43.15			2.0	
	Kbg. - - - - -			43.26 ₂			2.5 ₂	
	Ad. - - - - -			43.20			2.0	
4873	Mädl. - - - - -	14	39	24.62	17	29	46.5	Mädler's decl. is manifestly wrong.
	Arm. - - - - -			24.69			42.2	
	Yarn. - - - - -			24.55 ₂			40.8	
	Ay. 60 - - - - -			24.49			40.9	
	Kbg. - - - - -			24.54 ₂			42.1 ₂	
	Ay. 64 - - - - -			24.54 ₁₁			40.5 ₂	
	Ad. - - - - -			24.58			41.3	
4905	Mädl. - - - - -	14	45	37.51	19	37	11.3	Mädler's decl. about 2" to 3" too far south. The companion is 7 ^m and about 4" n. p.
	Arm. - - - - -			[37.31 ₁]			13.7	
	Ay. 50 - - - - -			37.48			12.7	
	RC ₂ - - - - -			37.43			15.1	
	Q. - - - - -			37.43 ₂			12.2	
	Wn. 67 - - - - -			37.49			13.7	
	Main - - - - -			37.49			14.5	
	Ay. 72 - - - - -						15.0 ₂	
	Ad. - - - - -			37.47			13.8	
4926	St. - - - - -	14	50	19.33	14	57	10.4	
	Main - - - - -			19.28			10.9	
	Pulc. - - - - -			19.26			9.7	
	Ad. - - - - -			19.29			10.2	
4933	Arm. - - - - -	14	51	21.90 ₁	16	53	33.0	Decl. 1875.0 from D'Ag., 34".1, 3 obs.; Lal., 32".2, 1 obs.; Pi., 33".2, 12 obs.; Tayl., 34".7, 4 obs.
	Kbg. - - - - -			22.01 ₂			33.9 ₂	
	Q. - - - - -			21.98 ₂			33.3 ₂	
	Ay. 64 - - - - -			21.92 ₂			32.8 ₂	
	Ay. 72 - - - - -						33.7	
	Ad. - - - - -			21.96			33.3	
5067	Mädl. - - - - -	15	16	28.14	13	0	59.6	
	Arm. - - - - -			28.25			59.8 ₁	
	Kbg. - - - - -			28.15 ₁			60.6 ₁	
	Ay. 64 and 73 - - - - -			28.05			58.5	
	Main - - - - -			28.18			58.2	
	Ad. - - - - -			28.15			58.9	
5085	St. - - - - -	15	19	59.54	15	52	8.4	
	Yarn. - - - - -			59.57			7.5 ₂	
	Pulc. - - - - -			59.54			9.0	
	Ad. - - - - -			59.55			8.6	
5120	Mädl. - - - - -	15	26	24.02	16	28	54.6	
	Arm. - - - - -						53.7 ₂	
	Kbg. - - - - -			24.08 ₁			51.6 ₁	
	Ay. 64 - - - - -			24.08			52.8	
	Main - - - - -			24.22			53.7	
	Ad. - - - - -			24.10			53.1	
5126	Mädl. - - - - -	15	27	18.91	16	26	11.9	Piazzi's decl. gives a positive P. M., Bradley's a negative P. M. I have assumed zero.
	Tayl. - - - - -						10.6	
	Arm. - - - - -			19.19			10.4	
	Ay. 64 - - - - -			18.98			9.1	
	Main - - - - -			19.00			10.4	
	Ad. - - - - -			19.02			10.1	
5132	Tayl. - - - - -	15	28	10.67	17	33	39.7	Seconds of decl.: Lal., 43".6; Pi., 39".2.
	Arm. - - - - -						41.2 ₁	
	Main - - - - -			10.55			38.1	
	Ad. - - - - -			10.61			39.4	
5135	Mädl. <i>corrected</i> - - - - -	15	28	50.04	10	57	29.2	Pulc. has double weight. The companion is about 3" south.
	Pulc. - - - - -			49.93			29.3	
	Ay. 50 - - - - -			49.94			29.5	
	Kbg. - - - - -			49.65 ₁			30.7 ₁	
	Main - - - - -			49.84			29.7 ₂	
	Ad. - - - - -			49.91			29.6	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
5146	Mädl. - - - - -	15	29	52.70	18	4	24.4	The star needs re-observing.
	Ay. 45 - - - - -						24.2	
	Arm. - - - - -			[53.13]			25.6	
	Yarn. - - - - -			52.82			22.5	
	Ad. - - - - -			52.76			24.1	
5150	Tayl. - - - - -	15	30	29.25	10	25	50.1	P. M. used — 0".04 by comparison with Piazzi. Place rather uncertain. Pulc. gives 49".6, which is included in final result.
	Hend. - - - - -			29.11			52.3	
	Arm. - - - - -			29.01 ₁			50.8	
	Q. - - - - -			29.14			49.4 ₁	
	Ad. - - - - -			29.15			50.5	
5152	Mädl. - - - - -	15	30	40.73	15	30	58.4	
	Arm. - - - - -						59.0	
	Ay. 64 - - - - -			40.75			58.0	
	Main - - - - -			40.76			59.5	
	Ad. - - - - -			40.75			58.8	
5153	Mädl. - - - - -	15	30	43.68	16	32	4.6	Br. has no decl. Piazzi agrees well with P. M. = 0.
	Tayl. - - - - -						3.6	
	Arm. - - - - -			43.76 ₁			2.8	
	R. C. ₂ - - - - -			43.61 ₁			2.0	
	Q. - - - - -			43.65 ₁			3.1 ₁	
5180	Ad. - - - - -			43.68			2.8	
5180	Mädl. - - - - -	15	35	14.28	16	25	46.7	
	Ay. 64 - - - - -			14.34			45.1	
	Main - - - - -			14.25			44.6	
	Yarn. - - - - -			14.17 ₂			45.2 ₂	
	Ay. 72 - - - - -			14.40 ₂			44.4 ₂	
5185	Ad. - - - - -			14.29			44.8	
5185	Mädl. - - - - -	15	35	54.54	13	15	2.9	
	Kbg. - - - - -			54.26 ₂			0.3 ₂	
	Yarn. - - - - -			54.48 ₂	14		58.4	
	Q. - - - - -			54.40			57.9 ₂	
	Main - - - - -			54.55	15		1.0	
5189	Ad. - - - - -			54.46	14		59.5	
5189	Mädl. - - - - -	15	36	[17.07]	18	51	50.8	
	Arm. - - - - -			[16.95 ₁]			40.7 ₁	
	Kbg. - - - - -			17.25 ₁			49.4 ₁	
	Ay. 64 - - - - -			17.22			49.6	
	Main - - - - -			17.36			48.6	
5203	Q. - - - - -			17.32 ₁			49.0 ₂	
	Ad. - - - - -			17.29			49.2	
5203	Mädl. - - - - -	15	39	1.43	17	39	33.8	
	Arm. - - - - -			1.57			32.2 ₁	
	Q. - - - - -			1.42 ₂			30.4 ₂	
	Ay. 64 - - - - -			1.45			32.4	
	Main - - - - -			1.31 ₂			31.0	
5216	Ad. - - - - -			1.44			31.5	
5216	St. - - - - -	15	40	25.14	15	48	52.3	
	Arm. - - - - -			25.22			52.6	
	Q. - - - - -			25.10 ₁₅			51.4 ₂	
	Kbg. - - - - -			25.12 ₂			52.2 ₂	
	Ay. - - - - -			25.16			52.1	
5219	Main - - - - -			25.24			52.1	
	Yarn. - - - - -			25.03 ₁			50.9 ₂	
	Ad. - - - - -			25.15			52.1	
5219	Mädl. - - - - -	15	40	39.01	15	55	9.1	
	Arm. - - - - -						1.7	
	Q. - - - - -			38.90	54		59.7 ₂	
	Ay. 64 - - - - -			39.03	55		0.7	
	Main - - - - -			39.08			0.9	
5223	Ad. - - - - -			39.00			0.8	
5223	Tayl. - - - - -	15	41	29.18	14	30	8.3	C. — o. in decl.: Lal. — 1".6; Pi. + 0".3. Adopted P. M. + 0".06. There is per- haps some P. M. in A. R.
	Arm. - - - - -			29.17			9.8	
	Yarn. - - - - -			29.05 ₂			7.6	
	Q. - - - - -			29.04			7.6	
	Main - - - - -			29.02			8.2	
5223	Ad. - - - - -			29.09			8.3	



No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
5234	St. - - - - -	15	43	6.82	18	31	45.2	
	Arm. - - - - -			6.74			45.5 ₁	
	Yarn. - - - - -			6.81 ₂			43.2	
	Kbg. - - - - -			6.74 ₂			45.2 ₂	
	Ay. - - - - -			6.80			45.0	
	Q. - - - - -						44.0 ₁	
	Ad. - - - - -			6.79			44.8	
5262	Mädl. - - - - -	15	47	22.88	13	35	20.9	
	Arm. - - - - -						22.6	
	Q. - - - - -			22.73			23.0 ₂	
	R. C. ₂ - - - - -			22.90			21.4 ₂	
	Kbg. - - - - -			22.96 ₁			23.8 ₁	
	Ay. 64 - - - - -			22.81			21.9	
	Ad. - - - - -			22.85			22.4	
5284	St. - - - - -	15	50	40.82	16	4	15.9	Weights: for Q, 1 $\frac{1}{2}$; Ay. 64, 2, 1; Main 65, 1 $\frac{1}{2}$; Main 70, 1, 1 $\frac{1}{2}$; Ay. 70, 1 $\frac{1}{2}$, 1.
	Arm. - - - - -			40.80			17.0 ₂	
	Q. - - - - -			40.24			15.4	
	Yarn. - - - - -			40.96 ₁			15.3 ₂	
	Ay. 64 - - - - -			40.80			16.0	
	Main 65 - - - - -			40.76			16.3	
	Main 70 - - - - -			40.75			16.2	
	Ay. 70 - - - - -			40.78			16.0	
	Ad. - - - - -			40.79			16.0	
5293	Tayl. - - - - -	15	51	[28.99]	14	46	27.8	P. M. used + 0".10, c. — o. Lal. — 1".6 (2 obs.), Pi. + 0".8.
	Yarn. - - - - -			28.67 ₂			28.3 ₂	
	Kbg. - - - - -			28.67 ₁			27.3 ₁	
	Wn. 67 - - - - -			28.66 ₃			27.2	
	Main - - - - -			28.72 ₂			27.9 ₂	
	Ad. - - - - -			28.68			27.8	
5315	Mädl. - - - - -	15	55	37.29	18	9	55.8	
	Arm. - - - - -			37.31			55.5	
	Yarn. - - - - -			37.21 ₂			56.0	
	R. C. ₂ - - - - -			37.41			56.8	
	Q. - - - - -			37.25			54.9 ₁	
	Ay. 64 - - - - -			37.32			55.7	
	Ay. 72 - - - - -			37.31			55.1	
	Ad. - - - - -			37.30			55.7	
5344	Mädl. - - - - -	15	59	54.20	10	16	28.3	Mädler's P. M. and decl. manifestly in error.
	Tayl. - - - - -						33.1	
	Arm. - - - - -			54.20 ₁			34.8 ₁	
	Main - - - - -			54.23			34.6	
	Ad. - - - - -			54.21			34.0	
5359	Mädl. - - - - -	16	1	39.60	10	13	39.7	
	Arm. - - - - -			39.52			38.7 ₁	
	Ay. 64 - - - - -			39.49 ₃			40.3	
	Yarn. - - - - -			39.48 ₁			39.2 ₂	
	Main - - - - -			39.60 ₂			39.6	
	Ad. - - - - -			39.53			39.6	
5361	Mädl. - - - - -	16	2	[7.81]	10	24	56.9	
	Arm. - - - - -			8.18			[53.6 ₁]	
	Q. - - - - -			8.14 ₁			56.2 ₂	
	Schj. - - - - -			8.20 ₁			55.3 ₁	
	Ay. 64 - - - - -			8.11			58.1	
	Main - - - - -			8.15			59.2	
	Ad. - - - - -			8.15			57.5	
5367	Mädl. - - - - -	16	2	25.96	17	22	52.8	
	Yarn. - - - - -			26.06 ₂			51.6	
	R. C. ₂ - - - - -			25.95 ₁			53.6	
	Q. - - - - -			25.98 ₂			51.8 ₂	
	Ay. 64 - - - - -			26.00			53.0	
	Wn. 67 - - - - -			26.00			52.2	
	Main - - - - -			26.06 ₂			54.5 ₂	
	Ay. 72 - - - - -			26.02			53.3	
	Ad. - - - - -			26.00			52.8	
5368	Ad. - - - - -	16	2	26.30	17	23	23.2	From the preceding by differences of A. R. and decl.

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
5376	Mädl. - - - - -	16	3	8.46	17	32	22.0	
	Arm. - - - - -			8.54			21.3	
	Yarn. - - - - -			8.40 ₂			19.0	
	Ay. 64 - - - - -			8.55			20.0	
	Main - - - - -			8.46			19.8	
	Ad. - - - - -			8.49			20.0	
5392	Mädl. - - - - -	16	5	49.17	16	59	27.3	Pulc. gives 26".4; no sensible change is made by adding this result.
	Ay. 45 - - - - -			.			26.6	
	Ay. 50 - - - - -			49.25			26.5 ₂	
	Yarn. - - - - -			49.26 ₂			24.9 ₂	
	Q. - - - - -			49.11 ₂			25.3 ₂	
	Ad. - - - - -			49.20			25.9	
5410	Mädl. - - - - -	16	7	[28.98]	13	51	46.4	The position refers to the middle point between the components. The difference is about 0".21 and 3".0. P. M. in A. R. from the Abo catalogue.
	Arm. - - - - -			.			46.1	
	Q. - - - - -			28.77			44.3	
	R. C. ₂ - - - - -			28.80			45.5	
	Ay. 64 - - - - -			28.80			45.5	
	Ad. - - - - -			28.79			45.6	
5422	Tayl. - - - - -	16	9	7.66 ₂	11	48	30.1	P. M. used — 0".06 in decl. c. — o.; Lal., + 2".4; Pi., — 0".4.
	Arm. - - - - -			7.73			33.2 ₁	
	Ay. 64 - - - - -			7.71 ₁			31.5 ₁	
	Main - - - - -			7.73			31.8	
	Ay. 72 - - - - -			7.76			30.6	
	Ad. - - - - -			7.72			31.2	
5426	Mädl. - - - - -	16	9	56.27	19	7	28.6	
	Arm. - - - - -			.			32.0 ₂	
	Yarn. - - - - -			56.27 ₂			29.3	
	Ay. 64 - - - - -			56.32			29.8	
	Wn. 67 - - - - -			56.27 ₂			31.0	
	Main - - - - -			56.28			30.3	
	Ad. - - - - -			56.29			30.5	
5428	Mädl. - - - - -	16	10	[6.28]	11	44	13.7	
	Arm. - - - - -			6.46			13.3 ₁	
	Kbg. - - - - -			6.61 ₁			13.6 ₁	
	Ay. 64 - - - - -			6.60 ₂			12.6 ₂	
	Main - - - - -			6.57 ₁			13.6 ₂	
	Ay. 69 - - - - -			6.03			13.4	
	Ad. - - - - -			6.57			13.3	
5466	St. - - - - -	16	16	24.36	19	26	52.5	Weights for later observations: Ay. 64, 2, 1 ₂ ; Main 65, 2; Main 70, 1 ₂ ; Ay. 70, 1 ₂ , 1 ₂ .
	Kbg. - - - - -			24.30			52.6	
	Yarn. - - - - -			[24.54]			53.0	
	R. C. ₂ - - - - -			24.32			53.4	
	Q. - - - - -			24.40			53.8	
	Ay. 64 - - - - -			24.36			53.5	
	Main 65 - - - - -			24.40			53.8	
	Main 70 - - - - -			24.36			53.6	
	Ay. 70 - - - - -			24.37			52.8	
	Ad. - - - - -			24.36			53.2	
5490	St. - - - - -	16	19	38.74	14	19	22.7	
	Pulc. - - - - -			38.86			21.1	
	Ay. 73 - - - - -			38.89			21.3	
	Ad. - - - - -			38.82			21.8	
5504	Jac. - - - - -	16	22	23.51	15	37	49.6	P. M. assumed = 0. 1 obs. by Lal. gives 47".2.
	Smyth - - - - -			23.69			49.6 ₁	
	Main - - - - -			23.52			50.1	
	Ad. - - - - -			23.57			49.8	
5507	Jac. - - - - -	16	22	42.55	15	42	37.6	I have corrected Smyth by — 10" and assumed P. M. = 0. Lal. gives 37".4.
	Q. - - - - -			42.70 ₁			36.2 ₁	
	Smyth - - - - -			42.75			36.5 ₁	
	Main - - - - -			42.75 ₂			38.2 ₂	
	Ad. - - - - -			42.69			37.3	
5529	Q. - - - - -	16	25	54.55	11	41	39.3 ₁	The star needs further observations.
	Yarn. - - - - -			54.56 ₂			38.4 ₂	
	Main - - - - -			54.56 ₂			40.0 ₂	
	Ay. 73 - - - - -			54.66 ₁			42.4 ₁	
	Ad. - - - - -			54.57			39.9	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
5532	Mädl. - - - - -	16	26	45.27	11	45	30.1	Later observations give an increased A.R.; I have provisionally assumed 45°.36.
	Jac. - - - - -			45.11 ₃			28.2	
	Arm. - - - - -			45.19			28.0 ₁	
	Yarn. - - - - -			45.33			28.7	
	Ay. 60 - - - - -			45.33			29.0	
	Schj. - - - - -			45.30 ₁			29.4 ₁	
	Q. - - - - -			45.33 ₂			27.8 ₁	
	Kbg. - - - - -			45.26 ₁			31.9 ₁	
	Main - - - - -			45.34			29.6	
	Ad. - - - - -			45.28			29.0	
5537	Jac. - - - - -	16	27	38.16	10	38	4.6	Two obs. by Lal. give 5''.0 in decl. P. M. assumed zero.
	Q. - - - - -			38.31			3.9 ₂	
	Main - - - - -			38.29			3.5	
	Smyth - - - - -			38.38			3.9	
	Ad. - - - - -			38.29			4.0	
5563	Tayl. - - - - -	16	32	2.39	13	56	30.6	c. — o. in decl.: Lal., — 1''.1; Pi., + 0''.2. P. M. used — 0''.04.
	Arm. - - - - -			2.49			31.2 ₁	
	Q. - - - - -			2.39			29.8 ₂	
	Main - - - - -			2.42			31.4	
	Ad. - - - - -			2.42			30.8	
5587	Tayl. - - - - -	16	35	[2.52]	12	38	23.6	c. — o.: Lal., + 1''.7 (v. Asten), 2 obs.; Pi., — 0''.8. P. M. used + 0''.03. Later observations give 22''.2; P. M. + 0''.02.
	Arm. - - - - -			-			22.3	
	Main - - - - -			2.13			22.0 ₂	
	Schj. - - - - -			2.20 ₁			24.5 ₁	
	Ad. - - - - -			2.15			22.9	
5620	Jac. - - - - -	16	39	[42.56]	15	58	39.1	c. — o.: D'Ag., + 0''.1, 2 obs.; Lal., — 0''.6, 1 obs. P. M. — 0''.07.
	Smyth - - - - -			42.82 ₁			39.3 ₁	
	Q. - - - - -			42.81 ₁			39.3 ₁	
	Main - - - - -			42.91			40.5	
	Wn. 67 - - - - -			42.90			39.0	
	Ad. - - - - -			42.88			39.4	
5634	Jac. - - - - -	16	42	13.30	11	21	16.0	1 obs. of Lal. gives 12''.4; perhaps there is P. M. The star needs re-observation.
	Ay. 60 - - - - -			13.45			15.1	
	Q. - - - - -			13.37			14.7 ₂	
	Smyth - - - - -			13.50			16.6	
	Main - - - - -			13.59			17.1	
	Ad. - - - - -			13.44			16.0	
5647	Jac. - - - - -	16	43	48.31	13	28	51.2	I have assumed no P. M. 3 obs. of D'Ag. give 52''.9; 1 obs. of Lal., 52''.2; 4 obs. of St., 52''.4. There may be a P. M. of — 0''.02.
	Schj. - - - - -			48.41			51.2 ₂	
	Main - - - - -			48.45			52.3	
	Smyth - - - - -			48.59			51.2	
	Q. - - - - -			48.34			51.4 ₂	
	Ad. - - - - -			48.42			51.5	
5674	St. - - - - -	16	46	23.40	15	11	7.8	
	Pule. - - - - -			23.38			8.1	
	Ad. - - - - -			23.39			7.9	
5686	Ay. 40 - - - - -	16	47	41.01	15	36	55.9	The star needs re-observation.
	Jac. - - - - -			40.88			57.2	
	Y. - - - - -			41.13			55.3	
	Q. - - - - -			41.18 ₁			55.9 ₁	
	Smyth - - - - -			41.26			57.0 ₂	
	Ad. - - - - -			41.08			56.2	
5692	Mädl. - - - - -	16	48	5.60	10	22	22.2	
	Arm. - - - - -			5.59			23.1	
	Ay. 50 - - - - -			-			21.7 ₂	
	Yarn. - - - - -			5.57			20.6	
	Kbg. - - - - -			5.55			23.4	
	Schj. - - - - -			5.66 ₁			23.6 ₁	
	Q. - - - - -			5.55 ₂			20.5 ₂	
	Wn. 67 - - - - -			5.72			22.1	
	Ad. - - - - -			5.60			22.1	

61

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
5702	Mädl. - - - - -	16 49 52.48	18 38 4.5	
	Arm. - - - - -	52.45	4.7	
	Yarn. - - - - -	52.52 ₂	2.9 ₉	
	Q. - - - - -	52.60 ₁	3.8 ₂	
	Ay. 72 - - - - -	52.67 ₁	4.4	
	Ad. - - - - -	52.52	4.1	
5716	Jac. - - - - -	16 52 [58.34]	15 38 31.5	The P. M. used in decl. is + 0''.14 from Lal., and rather precarious.
	Yarn. - - - - -	58.55	30.2	
	Smyth - - - - -	58.60	30.9	
	Main - - - - -	58.58	30.6	
	Ad. - - - - -	58.58	30.8	
5732	Jac. - - - - -	16 55 51.98	15 8 2.0	1 obs. by Lal. gives 2''.0; 8 by St., 1''.2.
	Yarn. - - - - -	52.04	0.5	The P. M. is manifestly very small.
	Ay. 60 - - - - -	52.12 ₂	2.2 ₂	
	Q. - - - - -	52.08	1.1 ₁	
	Main - - - - -	52.16	2.5	
	Smyth - - - - -	52.18	1.3	
	Ad. - - - - -	52.09	1.6	
5749	Mädl. - - - - -	16 57 24.24	14 16 26.6	
	Ay. 45 - - - - -	- - -	25.5	
	Kbg. - - - - -	24.25 ₁	24.9 ₁	
	Schj. - - - - -	24.16 ₂	23.8 ₂	
	Ay. 73 - - - - -	24.35 ₂	24.9 ₂	
	Ad. - - - - -	24.25	24.8	
5753	Mädl. - - - - -	16 57 54.56	13 47 3.7	The P. M. used is - 0''.03 in decl., which gives c.—o.: for Auwers, + 1''.4, 1 obs.; for Pi., - 2''.1; for C. A., - 0''.8.
	Tayl. - - - - -	- - -	3.0	
	Ay. 40 - - - - -	- - -	3.6	
	Hend. - - - - -	- - -	5.0	
	Arm. - - - - -	54.70	4.3	
	Q. - - - - -	54.57 ₂	4.4 ₂	
	Kbg. - - - - -	54.76 ₁	3.4 ₁	
	Ad. - - - - -	54.60	4.0	
5757	Mädl. - - - - -	16 58 12.82	13 44 55.6	I have employed Mädler's P. M. in decl. = - 0''.164. Auwers gives - 0''.140. Washington 1874-5 gives 12 ^s .86 56''.3.
	Hend. - - - - -	- - -	54.3	
	Arm. - - - - -	12.83	56.7	
	R. C. ₂ - - - - -	12.68	55.7	
	Ad. - - - - -	12.78	56.0	
5765	St. - - - - -	16 59 34.94	12 54 51.1	
	Yarn. - - - - -	34.78 ₁	50.1 ₂	
	Pulc. - - - - -	34.90	50.6	
	Ad. - - - - -	34.92	50.7	
5787	Jac. - - - - -	17 3 46.32	10 12 13.4	P. M. - 0 ^s .007 - 0''.16 from Lal. and B. Z. c.—o. in decl.: Lal., - 2''.0; B. Z., + 2''.0.
	Q. - - - - -	46.32	12.1 ₁	
	Smyth - - - - -	46.58	11.8	
	Main - - - - -	46.36 ₂	14.3	
	Ad. - - - - -	46.40	13.0	
5802	Mädl. - - - - -	17 6 34.25	10 44 17.4	
	Hend. - - - - -	- - -	18.2	
	Arm. - - - - -	34.40 ₂	18.0 ₁	
	Ay. 60 - - - - -	34.26	18.1	
	Ad. - - - - -	34.29	18.1	
5821	St. - - - - -	17 8 56.89	14 32 4.2	
	Yarn. - - - - -	56.88	3.8	
	R. C. ₂ - - - - -	56.79	[6.0]	
	Ay. 64 - - - - -	56.89	3.9	
	Main 65 - - - - -	56.85	4.7	
	Gylden - - - - -	- - -	3.6	
	Wn. 77 - - - - -	- - -	4.2	
	Leiden - - - - -	- - -	3.7	
	Ay. 70 - - - - -	56.88	3.6	
	Main 70 - - - - -	56.86	3.7	
	Ad. - - - - -	56.87	4.0	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
5841	Mädl. - - - - -	17	12	44.37	11	0	5.8	
	Ay. 40 - - - - -						6.3 ₁₄	
	Arm. - - - - -			44.19 ₁			6.9	
	Q. - - - - -			44.30 ₂			4.1 ₃	
	Yarn. - - - - -			44.26 ₃			5.1	
	Ad. - - - - -			44.32			5.8	
5856	Tayl. - - - - -	17	14	48.44 ₂	18	11	15.9 ₂	Pi. gives 16".0, Lal. gives 18".0 (1 obs.). I have assumed no P. M.
	Kbg. - - - - -			48.30 ₁			15.5 ₁	
	Main - - - - -			48.31			15.4	
	Ad. - - - - -			48.35			15.6	
5939	Mädl. - - - - -	17	28	36.92	13	14	53.3	
	Arm. - - - - -			36.65			55.1	
	Q. - - - - -			36.50 ₂			52.9 ₁	
	Ay. 64 - - - - -			36.62			53.0	
	Main - - - - -			36.48			56.0	
	Wn. 67 - - - - -			36.61 ₁			55.2 ₁	
	Ad. - - - - -			36.57			54.5	
5941	St. - - - - -	17	29	7.92	12	39	10.2	
	Yarn. - - - - -			7.90			10.0	
	R. C. ₂ - - - - -			7.85			10.4	
	Ay. 64 - - - - -			7.93			9.9	
	Main 65 - - - - -			7.93			10.3	
	Gylden - - - - -			-			9.3	
	Wn. 67 - - - - -			-			9.9	
	Ay. 70 - - - - -			7.93			10.1	
	Main 70 - - - - -			7.93			9.6	
	Leiden - - - - -			-			9.8	
	Ad. - - - - -			7.92			9.9	
5942	Arm. - - - - -	17	29	16.97 ₁	13	13	19.1	Lal. gives 22".7 (1 obs.), Pi. gives 18".5, Tayl. gives 16".8 (3 obs.). I have as- sumed P. M. = 0.
	Q. - - - - -			16.71 ₁			19.6 ₁	
	Wn. 67 - - - - -			16.67 ₂			20.7	
	Main - - - - -			16.72			18.7	
	Ad. - - - - -			16.75			19.5	
5991	Tayl. - - - - -	17	36	22.17	16	0	43.4 ₁	The P. M. used + 0".12 gives c. — o. for Pi. + 0".7.
	Arm. - - - - -			22.08			44.1	
	Rümik - - - - -			22.09			44.2	
	Ay. 45 - - - - -			22.01			42.4	
	Kbg. - - - - -			22.13 ₁			41.5 ₁	
	Q. - - - - -			21.88 ₁			41.3 ₁	
	Ay. 73 - - - - -			22.09 ₁			42.6 ₂	
	Ad. - - - - -			22.06			42.8	
6030	Tayl. - - - - -	17	43	22.24	19	17	48.8	Employing P. M. + 0".04 we find c. — o. D'Ag. + 1".3 (3 obs.); Lal. — 1".5 (2 obs.); Pi. + 0".4.
	Arm. - - - - -			21.95			49.0	
	R. C. ₂ - - - - -			22.12			48.3	
	Kbg. - - - - -			22.37 ₂			49.1 ₂	
	Ay. 73 - - - - -			22.12			48.3	
	Ad. - - - - -			22.13			48.5	
6094	Mädl. - - - - -	17	54	[29.94]	16	45	38.0	Mädler's P. M. in A. R. has been omitted. His decl. is manifestly in error.
	Arm. - - - - -			29.56			35.3	
	Yarn. - - - - -			29.57 ₂			33.2	
	Ay. 60 - - - - -			29.59			34.1	
	Kbg. - - - - -			29.33 ₁			33.9 ₁	
	Q. - - - - -			29.50 ₂			35.2 ₂	
	Ad. - - - - -			29.51			34.3	
6245	Arm. - - - - -	18	17	17.42	17	45	56.9 ₂	Pule, 1841 gives 54".6; there is probably some P. M. in A. R.
	Jac. - - - - -			[17.27]			55.7	
	Smyth - - - - -			-			53.2	
	Q. - - - - -			17.45 ₂			54.0 ₂	
	Ay. 72 - - - - -			17.60 ₁			54.5 ₁	
6397	Ad. - - - - -			17.47			54.8	P. M. in A. R. used + 0".005. Mädler re- jected.
	Mädl. - - - - -	18	41	[29.38]	18	2	39.0	
	Arm. - - - - -			29.95			39.1 ₂	
	R. C. ₂ - - - - -			30.01			36.4	
	Kbg. - - - - -			29.84 ₁			38.5 ₁	
	Ay. 64, 71 - - - - -			30.02			38.3	
	Q. - - - - -			29.94 ₂			38.0 ₂	
	Ad. - - - - -			29.97			37.9	

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
6482	Mädl. - - - - -	18 53 2.56	13 44 25.2	
	Arm. - - - - -	2.48	24.2	
	Yarn. - - - - -	2.73	24.6	
	Kbg. - - - - -	2.72 ₁	22.9 ₁	
	Q. - - - - -	2.57 ₂	24.1 ₁	
	Schj. - - - - -	2.59 ₂	24.6 ₂	
	Main - - - - -	2.73	24.6	
	Ay. 64 - - - - -	2.58	23.7	
	Ad. - - - - -	2.62	24.2	
6483	Mädl. - - - - -	18 53 20.39	13 27 28.6	
	Arm. - - - - -	20.48	26.2	
	Kbg. - - - - -	20.52 ₂	[30.2 ₁]	
	Q. - - - - -	20.35 ₂	27.6	
	Ay. 64 - - - - -	20.42	27.1	
	Main - - - - -	20.41	26.9	
	Ad. - - - - -	20.43	27.0	
6487	St. - - - - -	18 53 56.95	14 53 59.9	
	Arm. - - - - -	57.04	59.6	
	R. C. ₂ - - - - -	56.88	59.8	
	Yarn. - - - - -	56.95	61.4 ₃	
	Ay. 64 - - - - -	56.92	60.3	
	Main 65 - - - - -	56.90	60.6	
	Main 70 - - - - -	56.90	60.3	
	Ay. 70 - - - - -	56.92	60.5	
	Ad. - - - - -	56.93	60.2	
6527	Q. - - - - -	18 59 23.95 ₁	18 57 25.1 ₂	Airy 1872 is 3 ^s in error in A. R. ; Bessel 1815 has been wrongly reduced. I get 2 ^u .9 more in decl., and have assumed P. M. in decl. + 0 ^u .02, which gives c. — 0. — 1 ^u .1 for Bradley (Auwers) and + 0 ^u .6 for Bessel.
	Smyth - - - - -	24.05 ₂	25.5	
	Main - - - - -	23.93	26.6	
	Ay. 72 - - - - -	24.01	25.2	
	Wn. 72 - - - - -	24.03	25.6	
	Ad. - - - - -	24.00	25.6	
6528	St. - - - - -	18 59 39.83	13 40 45.0	Obs. since R. C. ₂ very numerous.
	Yarn. - - - - -	39.81	44.7	
	Arm. - - - - -	39.78	44.9	
	Kbg. - - - - -	39.77	44.0	
	R. C. ₂ - - - - -	39.74	44.0	
	Ay. 64 - - - - -	39.84	45.9	
	Arg. - - - - -	39.92	45.1	
	Eng. - - - - -	39.90	45.0	
	Main 65 - - - - -	39.82	45.3	
	Main 70 - - - - -	39.86	45.1	
	Wn. 67 - - - - -	-	45.7	
	Leiden - - - - -	-	45.0	
	Ay. 70 - - - - -	39.87	45.2	
	Ad. - - - - -	39.83	45.0	
6543	Mädl. - - - - -	19 1 5.59	10 52 49.6	
	Arm. - - - - -	5.44	47.8	
	Ay. 64 - - - - -	5.51	49.6	
	Main - - - - -	5.58	49.5	
	Ad. - - - - -	5.53	49.5	
6595	St. - - - - -	19 11 56.95	11 22 17.6	
	Yarn. - - - - -	56.90	17.8	
	R. C. ₂ - - - - -	56.88	17.9	
	Main 65 - - - - -	56.88	17.7	
	Eng. - - - - -	57.02	17.3	
	Main 70 - - - - -	56.95	18.2	
	Ay. 70 - - - - -	56.93	17.5	
	Pulc. - - - - -	56.91	17.3	
	Ad. - - - - -	56.93	17.7	
6615	Mädl. - - - - -	19 13 [49.18]	12 8 42.8	
	Hend. - - - - -	-	43.9 ₂	
	Kbg. - - - - -	49.30 ₂	45.0 ₂	
	Ay. 72-74 - - - - -	49.37	43.4	
	Ad. - - - - -	49.36	44.0	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
6617	Mädl. - - - - -	19	14	0.12	11	18	17.1	
	Ay. 40 - - - - -			-			16.9	
	Arm. - - - - -			0.36			17.2	
	Q. - - - - -			0.22 ₁₃			16.2 ₁₀	
	Smyth - - - - -			0.29			18.3	
	Ad. - - - - -			0.25			17.1	
6642	Mädl. - - - - -	19	18	45.26	16	41	46.2	
	Hend. - - - - -			-			45.3	
	Ay. 40 - - - - -			-			45.9	
	Yarn. - - - - -			45.21			44.0 ₈	
	Q. - - - - -			45.32 ₂			44.6 ₂	
	Ad. - - - - -			45.26			44.9	
6644	Mädl. - - - - -	19	19	0.72	11	40	44.4	
	Arm. - - - - -			0.58			44.1	
	Q. - - - - -			0.51			42.9	
	R. C. ₂ - - - - -			0.52			41.7	
	Ay. 60 - - - - -			0.54			43.3	
	Smyth - - - - -			0.60			43.0	
	Ay. 72 - - - - -			0.57			42.3	
	Ad. - - - - -			0.57			42.9	
6647	Mädl. - - - - -	19	19	8.20	16	42	51.0	
	Hend. - - - - -			-			50.3	
	Ay. 40 - - - - -			-			51.0	
	Arm. - - - - -			8.34			50.8	
	Yarn. - - - - -			8.22			49.4	
	Q. - - - - -			8.15			49.8 ₂	
	Ad. - - - - -			8.23			50.3	
6654	Mädl. - - - - -	19	19	59.35	19	33	19.5	
	Ay. 45 - - - - -			-			17.5	
	Arm. - - - - -			59.31			19.2	
	Yarn. - - - - -			59.33 ₂			17.1	
	Kbg. - - - - -			59.39 ₂			17.4	
	Q. - - - - -			59.42 ₁			17.9 ₁	
	Ad. - - - - -			59.35			17.8	
6661	Mädl. - - - - -	19	20	45.59	18	51	5.5	
	Arm. - - - - -			45.78			5.1	
	Ay. 64 - - - - -			45.79			3.4	
	Main - - - - -			45.75			3.1	
	Ad. - - - - -			45.77			3.9	
6663	Mädl. - - - - -	19	21	0.37	19	38	[34.0]	Bradley has but 1 obs.; the P. M. used represents this to about +0".8 (c.—o.), and Pi. to — 0".3.
	Arm. - - - - -			0.50			39.6	
	Q. - - - - -			0.41 ₃			38.1 ₂	
	Ay. 64 - - - - -			0.54			40.0	
	Yarn. - - - - -			0.32 ₁			39.6	
	Main - - - - -			0.51			40.2	
	Ad. - - - - -			0.45			39.6	
6709	Mädl. - - - - -	19	29	5.43	19	30	9.2	
	Arm. - - - - -			5.52			7.7	
	Yarn. - - - - -			5.41			5.7	
	Ay. 64 - - - - -			5.47			6.5	
	Main - - - - -			5.48			6.2	
	Ay. 72 - - - - -			5.54			7.0	
	Ad. - - - - -			5.48			6.6	
6724	Mädl. - - - - -	19	31	37.86	16	11	0.6	
	Arm. - - - - -			37.74			1.1	
	Kbg. - - - - -			37.96 ₂			0.4 ₂	
	Ay. 64, 73 - - - - -			37.79			0.4	
	Yarn. - - - - -			37.79 ₂			0.8 ₂	
	Ad. - - - - -			37.82			0.7	
6739	Mädl. - - - - -	19	34	30.53	17	43	41.2	
	Ay. 50 - - - - -			30.58			41.6 ₉	
	Kbg. - - - - -			30.52 ₂			41.9 ₂	
	Yarn. - - - - -			30.53 ₂			40.8	
	Ay. 73 - - - - -			30.54 ₂			39.6 ₂	
	Ad. - - - - -			30.54			41.0	

DETAILS OF POSITIONS—DIVISION I.

65

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
6744	Mädl. - - - - -	19 35 26.11	17 11 17.8	
	Arm. - - - - -	25.96	16.8	
	Yarn. - - - - -	26.04 ₂	15.7	
	Ay. 60 - - - - -	26.09	15.7 ₁₀	
	Q. - - - - -	25.91 ₂	15.3 ₁	
	Ad. - - - - -	26.03	15.9	
6747	Mädl. - - - - -	19 36 20.96	11 54 7.5	
	Arm. - - - - -	21.00	5.6	
	Ay. 64 - - - - -	20.98	4.0	
	Main - - - - -	20.95	3.7	
	Ad. - - - - -	20.97	4.4	
6749	Mädl. - - - - -	19 36 41.21	11 32 2.8	
	Arm. - - - - -	41.05	2.6	
	Ay. 50 - - - - -	41.14	2.0	
	Yarn. - - - - -	41.13	1.6	
	Kbg. - - - - -	41.04 ₁	3.0 ₁	
	Q. - - - - -	41.11	1.0 ₂	
	Ad. - - - - -	41.11	2.0	
6750	Mädl. - - - - -	19 36 [45.60]	18 10 21.8	
	Arm. - - - - -	45.23	23.6	
	R. C. ₂ - - - - -	45.24	18.7 ₂	
	Q. - - - - -	45.10 ₁	20.7 ₂	
	Ay. 72 - - - - -	45.17	21.2	
	Ad. - - - - -	45.20	21.3	
6759	Mädl. - - - - -	19 38 45.28	13 0 15.4	I have corrected an error of 3" in one of the observations of Ay. 1864, which changes his declination by +0".75.
	Arm. - - - - -	45.39	15.9	
	Q. - - - - -	45.15 ₂	15.0 ₁	
	Kbg. - - - - -	45.19 ₁	17.1 ₁	
	Ay. 64 - - - - -	45.23	15.8	
	Main - - - - -	45.30	17.4	
	Ad. - - - - -	45.27	16.3	
6761	Mädl. - - - - -	19 38 46.82	12 55 52.4	
	Arm. - - - - -	46.88	55.2	
	Q. - - - - -	46.63 ₂	53.8 ₁	
	Ay. 64 - - - - -	46.66	53.4	
	Main - - - - -	46.70 ₂	53.8 ₂	
	Ad. - - - - -	46.75	54.1	
6772	St. - - - - -	19 40 19.01	10 18 36.4	
	R. C. ₂ - - - - -	18.92	36.3	
	Yarn. - - - - -	18.98	36.4	
	Ay. 64 - - - - -	18.97	36.5	
	Gylden - - - - -	-	36.4	
	Main 65 - - - - -	18.98	36.5	
	Wn. 70 (67) - - - - -	-	36.4	
	Leiden - - - - -	-	36.5	
	Main 70 - - - - -	18.98	36.6	
	Ay. 70 - - - - -	18.97	36.3	
	Ad. - - - - -	18.98	36.4	
6783	St. - - - - -	19 41 48.94	18 13 38.9	
	R. C. ₂ - - - - -	48.93 ₂	38.6	
	Ad. - - - - -	48.94	38.8	
6789	Mädl. - - - - -	19 42 48.55	11 30 23.3	
	Arm. - - - - -	48.72 ₂	21.6	
	Ay. 60 - - - - -	48.51	22.5	
	R. C. ₂ - - - - -	48.60 ₁	23.2 ₁	
	Kbg. - - - - -	48.60 ₁	24.1 ₁	
	Q. - - - - -	48.51	21.8 ₂	
	Main - - - - -	48.59	23.7	
	Ay. 72 - - - - -	48.55	22.7	
	Ad. - - - - -	48.57	22.7	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
6791	Müdl. - - - - -	19	43	[0.02]	11	22	26.4	
	Bessel - - - - -		42	59.69			28.1	
	Arm. - - - - -			59.74 ₂			28.1	
	Jac. - - - - -			[59.41]			28.4	
	Ay. 64 - - - - -			59.56			27.9	
	Main - - - - -			59.61			29.4	
	Ad. - - - - -			59.60			28.4	
6794	Müdl. - - - - -	19	43	25.84	18	49	48.7	
	Arm. - - - - -			25.84			47.4	
	Yarn. - - - - -			25.77			47.5	
	R. C. ₂ - - - - -			[25.52 ₁]			49.4 ₂	
	Ay. 60 - - - - -			25.80 ₁			47.4	
	Main - - - - -			25.75			47.1	
	Ad. - - - - -			25.80			47.6	
6805	Müdl. - - - - -	19	45	2.32	10	6	16.6	
	Arm. - - - - -			2.28			17.6	
	R. C. ₂ - - - - -			2.26			15.4	
	Kbg. - - - - -			2.29 ₁			16.8 ₁	
	Q. - - - - -			2.18 ₂			14.9 ₁	
	Ay. 64 - - - - -			2.32			14.7	
	Ad. - - - - -			2.28			16.0	
6819	Müdl. - - - - -	19	46	47.37	18	21	10.0	
	Arm. - - - - -						7.7 ₂	
	Ay. 64 - - - - -			47.25			6.7	
	Main - - - - -			47.34			6.1	
	Ad. - - - - -			47.32			6.7	
6838	Müdl. - - - - -	19	50	19.14	11	5	37.1	
	Arm. - - - - -			18.77			37.1	
	Q. - - - - -			18.88 ₁			36.1 ₁	
	Kbg. - - - - -			19.00			38.5 ₁	
	Ay. 64 - - - - -			19.00			36.3	
	Main - - - - -			18.92			36.2	
	Ad. - - - - -			18.95			36.8	
6839	Müdl. - - - - -	19	50	20.56	16	18	18.8	
	Arm. - - - - -			20.24			19.5	
	Q. - - - - -			20.47 ₂			18.1 ₁	
	Kbg. - - - - -			20.57 ₁			17.1 ₁	
	Ay. 64 - - - - -			20.56			18.5	
	Main - - - - -			20.63			19.3	
	Ay. 72 - - - - -			20.68 ₂			18.8 ₂	
6853	Ad. - - - - -			20.51			18.7	
	Müdl. - - - - -	19	52	4.91	16	27	17.0	
	Arm. - - - - -			4.97			14.5 ₁	
	R. C. ₂ - - - - -			4.88			13.5	
	Ay. 64 - - - - -			4.93			13.8	
6855	Ad. - - - - -			4.92			13.8	
	Müdl. - - - - -	19	52	33.28	16	9	31.3	I have corrected a misprint of 20'' in Müdl. Bradley has no decl. I have assumed P. M. in decl. = 0.
	Arm. - - - - -			33.19			30.9	
	R. C. ₂ - - - - -			33.17			28.1	
	Ay. 64 - - - - -			32.99			29.9	
	Smvth - - - - -			33.09			28.9	
	Q. - - - - -			32.92 ₂			28.3 ₁	
	Yarn. - - - - -			33.05 ₁			30.5 ₁	
	Ad. - - - - -			33.08			29.5	
6858	St. - - - - -	19	53	11.89	19	9	14.4	
	Arm. - - - - -			11.81			13.9 ₂	
	Q. - - - - -			11.71 ₂			13.0 ₂	
	Yarn. - - - - -			11.81 ₁			13.9	
	Ad. - - - - -			11.84			14.0	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
6868	Mädl. - - - - -	19	54	24.61	17	10	35.6	
	Arm. - - - - -			24.59			32.9 ₁	
	Q. - - - - -			24.53			34.6	
	Kbg. - - - - -			24.64 ₁			34.3 ₁	
	Ay. 64, 65 - - - - -			24.61			34.0	
	Main - - - - -			24.61			36.3	
	Ad. - - - - -			24.59			34.8	
6890	Mädl. - - - - -	19	57	46.82	15	40	56.3	
	Kbg. - - - - -			46.82 ₂			55.9 ₂	
	Ay. 64 - - - - -			46.80			54.2	
	Main - - - - -			46.82			55.6 ₂	
	Ay. 72 - - - - -						54.1 ₃	
	Ad. - - - - -			46.82			55.2	
6896	Mädl. - - - - -	19	58	18.75	16	46	1.9 ₁	Mädler's decl. 14''.6 in error; caused by an error in Taylor.
	Arm. - - - - -			18.88			18.1	
	Q. - - - - -			18.79			10.0	
	R. C. ₂ - - - - -			19.07			15.3	
	Ay. 64 - - - - -			18.88			16.6	
	Ad. - - - - -			18.90			16.5	
6897	Mädl. - - - - -	19	58	29.18	16	44	1.1	
	Q. - - - - -			29.19		43	59.0	
	R. C. ₂ - - - - -			29.22			57.2	
	Ay. 60 - - - - -			29.25			59.8	
	Ay. 64 - - - - -			29.19 ₂			59.2 ₂	
	Ad. - - - - -			29.21			58.8	
6901	Mädl. - - - - -	19	59	36.96	19	38	3.7	
	Hend. - - - - -						3.9	
	R. C. ₂ - - - - -			36.83			2.7	
	Q. - - - - -			36.79 ₂			1.8 ₁	
	Ay. 64 - - - - -			36.77			3.2 ₂	
	Ad. - - - - -			36.84			3.1	
6952	Mädl. - - - - -	20	8	29.53	14	49	6.3	Right ascension by later observations 29 ^m .55.
	Arm. - - - - -			29.40			7.9	
	Ay. 50 - - - - -			29.23 ₁			6.3 ₁	
	Ay. 60 - - - - -			29.47			6.7	
	Q. - - - - -			29.47 ₁			3.8 ₁	
	Yarn. - - - - -			29.45			4.5	
	Ay. 72 - - - - -			29.53 ₁			5.5	
	Ad. - - - - -			29.45			5.9	
7065	Mädl. - - - - -	20	24	18.89	10	28	43.4	
	Arm. - - - - -			18.78			44.4	
	Q. - - - - -			18.77			42.3	
	Main - - - - -			18.93			43.4	
	Ay. 64 - - - - -			18.80			42.5	
	Main - - - - -			18.87			43.3	
	Ad. - - - - -			18.84			43.2	
7079	St., p. m. - - - - -	20	25	14.40	10	50	27.0	The middle point between the two components. Their difference is about -1 ^s .03 + 3'' ^s .8.
	Arm. - - - - -			14.34			26.5	
	Q. - - - - -			14.30			26.6	
	R. C. ₂ - - - - -			14.60			26.7	
	Yarn. - - - - -			14.36			27.8	
	Ay. 64 - - - - -			14.40 ₁			26.2 ₁	
	Main - - - - -			14.27			26.7	
	Ad. - - - - -			14.38			26.8	
7088	St. - - - - -	20	27	14.42	10	52	46.7	Yarn. and Ay. 64 have received double weight in A. R.; Q., Main 65, Main 70, weight 1½ in each co-ordinate; and Ay. 70 the same in A. R., and Wn. 67 in decl.
	Arm. - - - - -			14.33			46.2	
	Q. - - - - -			14.35			46.7	
	Yarn. - - - - -			14.41			47.7	
	Ay. 64 - - - - -			14.41			47.8	
	Main 65 - - - - -			14.44			47.8	
	Main 70 - - - - -			14.41			47.6	
	Wn. 70 (67) - - - - -						47.3	
	Ay. 70 - - - - -			14.41			46.5	
	Ad. - - - - -			14.40			47.1	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
7094	Mädl. - - - - -	20	28	2.32	12	36	1.7	
	Q. - - - - -			2.26			0.5 ₂	
	Ay. 64 - - - - -			2.24			1.4	
	Main - - - - -			2.17			1.8	
	Yarn. - - - - -			2.43 ₁			0.7 ₂	
	Ay. 72 - - - - -			-			1.4 ₂	
	Ad. - - - - -			2.27			1.3	
7107	Mädl. - - - - -	20	29	27.78	14	14	40.8	
	Arm. - - - - -			27.75			41.0 ₂	
	R. C. ₂ - - - - -			27.70			40.5	
	Ay. 60 - - - - -			27.76 ₂			39.4	
	Q. - - - - -			27.75 ₂			37.8 ₂	
	Yarn. - - - - -			27.76			39.3 ₂	
	Ad. - - - - -			27.75			39.9	
7121	St. - - - - -	20	31	41.18	14	9	41.4	
	Arm. - - - - -			41.16			42.7	
	Main - - - - -			41.05			41.0	
	Yarn. - - - - -			41.20			42.1	
	Ad. - - - - -			41.16			41.7	
7125	Mädl. - - - - -	20	31	[50.43]	10	56	34.1	
	Arm. - - - - -			50.37			33.9	
	Q. - - - - -			50.20 ₂			32.8 ₂	
	Kbg. - - - - -			50.26 ₂			34.7 ₂	
	Ay. 64 - - - - -			40.27			32.3	
	Main - - - - -			50.37			34.5	
	Ad. - - - - -			50.30			33.7	
7137	Mädl. - - - - -	20	32	50.01	12	52	41.4	
	Kbg. - - - - -			50.00 ₂			39.9 ₂	
	Ay. 60 - - - - -			50.00			38.8	
	Ay. 64 - - - - -			49.97 ₁₄			39.1 ₁₄	
	Ad. - - - - -			49.99			39.2	
7146	Mädl. - - - - -	20	33	[16.67]	15	24	2.4	There is a general confusion in the older declinations; d'Agelet is in error about 5"; P. M.=0 agrees with Br. to -0".6 and with Pi. to +1".4; both c.—o.
	Arm. - - - - -			17.08			2.7	
	Ay. 50 - - - - -			17.08			1.0	
	Yarn. - - - - -			17.02			0.6	
	Ay. 60 - - - - -			17.07 ₁₆			1.8 ₁₆	
	Kbg. - - - - -			16.92 ₂			2.1	
	Main - - - - -			17.08 ₂	23		59.3 ₁	
	Ay. 72 - - - - -			17.08	24		1.3 ₂	
	Ad. - - - - -			17.05	24		1.5	
7149	St. - - - - -	20	33	49.94	15	28	20.6	Weights as usual increased for the later observations where very frequent.
	Yarn. - - - - -			49.93			20.5	
	Kbg. - - - - -			49.85			20.3	
	Ay. 64 - - - - -			49.91			20.5	
	Main 65 - - - - -			49.88			20.8	
	Main 70 - - - - -			49.87			20.0	
	Ay. 70 - - - - -			49.91			20.5	
	Ad. - - - - -			49.90			20.5	
7150	Arm. - - - - -	20	33	52.31	10	48	22.8	Two obs. of Lalande give decl. 16".3, from which a P. M. of +0".08 is inferred. That given by Mädl. in A. R. (+0".0074) is not confirmed.
	Jac. - - - - -			52.30			23.2	
	R. C. ₂ - - - - -			52.45			23.1	
	Q. - - - - -			52.22			21.4	
	Ay. 64 - - - - -			52.31			24.0	
	Smyth - - - - -			-			22.0	
	Ad. - - - - -			52.32			22.8	
7157	Mädl. - - - - -	20	34	[45.52]	15	11	50.2	
	Arm. - - - - -			45.87			60.0	
	Jac. - - - - -			45.88			59.9	
	R. C. ₂ - - - - -			45.76 ₂			57.6 ₂	
	Q. - - - - -			45.95 ₂			58.6 ₁	
	Smyth - - - - -			-			59.1 ₂	
	Ay. 72 - - - - -			45.94 ₂			58.8 ₂	
	Ad. - - - - -			45.88			59.1	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
7160	Müdl. - - - - -	20	35	25.15	14	8	22.6	
	Arm. - - - - -			25.12			23.8	
	Ay. 64 - - - - -			25.04			21.6	
	Main - - - - -			25.10			22.3	
	Q. - - - - -			25.07 ₂			20.4 ₂	
	Wn. 73 - - - - -			25.02			21.5	
	Ad. - - - - -			25.08			22.1	
7173	St. - - - - -	20	37	37.37	14	37	38.1	The Pulkova declination given as a correction to St.
	Arm. - - - - -			37.33			40.4	
	Q. - - - - -			37.35 ₂			37.4 ₂	
	Ay. 71 - - - - -			37.33 ₁			38.4 ₁	
	Pulc. - - - - -			-			39.0	
	Ad. - - - - -			37.35			38.7	
7199	(From 7200) Ad. - - - - -	20	40	50.75	15	40	31.1	The difference between this and the companion has been assumed according to Struve.
7200	Arg. - - - - -	20	40	51.61	15	40	31.2	
7200	R. C. ₂ - - - - -			51.54			29.8	
	Q. - - - - -			51.48 ₁			29.0 ₁	
	Yarn. - - - - -			51.58			30.8 ₂	
	Ay. 69 - - - - -			51.57 ₁₂			30.2 ₁₂	
	Main - - - - -			51.56 ₂			30.0	
	Leiden - - - - -			-			29.9	
	Ad. - - - - -			51.57			30.3	
7223	Müdl. - - - - -	20	43	40.12	12	4	45.7	
	Arm. - - - - -			40.12			44.9	
	R. C. ₂ - - - - -			40.25			43.2	
	Ay. 60 - - - - -			40.23			44.5	
	Q. - - - - -			40.24 ₂			42.9 ₁	
	Ad. - - - - -			40.19			44.0	
7257	Müdl. - - - - -	20	49	40.89	12	5	29.6	
	Arm. - - - - -			40.87			30.4	
	Kbg. - - - - -			40.76 ₂			31.6 ₂	
	Ay. 64 - - - - -			40.64			29.4	
	Main - - - - -			40.72			29.3	
	Ay. 72 - - - - -			40.66			30.7	
	Ad. - - - - -			40.76			30.1	
7258	Müdl. - - - - -	20	49	41.61	13	14	46.2	
	Arm. - - - - -			41.60			43.3 ₂	
	Kbg. - - - - -			41.58			46.5	
	Ay. 64 - - - - -			41.57			45.2	
	Main - - - - -			41.66			44.3	
	Yarn. - - - - -			41.87 ₁			44.4 ₂	
	Ad. - - - - -			41.63			44.8	
7271	Müdl. - - - - -	20	52	24.75	10	21	28.0	
	Arm. - - - - -			24.77			27.9 ₁	
	Kbg. - - - - -			24.67			29.0	
	R. C. ₂ - - - - -			24.54			29.1	
	Ay. 64 - - - - -			24.65			28.2	
	Yarn. - - - - -			24.76 ₂			29.1 ₂	
	Ad. - - - - -			24.69			28.6	
7418	St. - - - - -	21	16	18.35	19	16	14.0	
	R. C. ₂ - - - - -			-			13.9	
	Q. - - - - -			18.28 ₂			13.8	
	Yarn. - - - - -			18.36			15.2 ₂	
	Main - - - - -			18.43 ₂			15.0 ₂	
	Wn. 70 (67) - - - - -			-			14.4	
	Pulc. - - - - -			18.30			14.9	
7450	Ay. 73 - - - - -			-			13.9 ₂	P. M. assumed zero; 1 obs. of Lalande gives decl. 6".3.
	Ad. - - - - -			18.34			14.3	
	Arm. - - - - -	21	20	38.02 ₁	18	50	7.0	
	Jac. - - - - -			37.93			5.4	
	Yarn. - - - - -			38.15			5.1 ₂	
	Main - - - - -			38.27			6.1	
7450	Smyth - - - - -			38.07			5.9	
	Ad. - - - - -			38.10			6.0	

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
7520	Mädl. - - - - -	21 31 [54.72]	18 45 28.0	
	Arm. - - - - -	54.51	27.9	
	R. C ₂ - - - - -	54.46	24.2	
	Kbg. - - - - -	54.48	24.0 ₂	
	Q. - - - - -	54.51 ₂	24.3 ₁	
	Ay. 64 - - - - -	54.47	25.4	
	Ay. 70 - - - - -	54.48 ₁	25.5	
	Yarn. - - - - -	54.68 ₁	26.5 ₂	
	Ad. - - - - -	54.50	25.4	
7528	Arm. - - - - -	21 33 11.48	19 42 9.3	There is an error of 30'' in Lalande's decl.
	Yarn. - - - - -	11.48	6.8	
	Smyth - - - - -	11.55	8.0	
	Main - - - - -	11.48	8.3	
	Q. - - - - -	11.42 ₁	8.0	
	Wn. 72 - - - - -	11.63 ₂	7.5 ₂	
	Ad. - - - - -	11.51	8.0	
7553	Mädl. - - - - -	21 36 [26.27]	10 15 18.2	P. M. = 0 gives c. — 0. in decl.; Bradley (Bessel) — 0''.2 (1 obs.); D'Ag. (2 obs.) + 1''.7; Lal. (2 obs.) + 0''.7; Pi. — 0''.2.
	Arm. - - - - -	26.70 ₁	18.9	
	R. C ₂ - - - - -	26.44	19.4	
	Q. - - - - -	26.37 ₂	19.0 ₁	
	Kbg. - - - - -	26.68 ₂	17.4 ₂	
	Ay. 72 - - - - -	26.54	19.8	
	Ad. - - - - -	26.53	19.0	
7567	Mädl. - - - - -	21 38 35.62	16 46 41.1	
	Arm. - - - - -	35.61	39.9 ₂	
	Q. - - - - -	35.38 ₁	39.2 ₁	
	Ay. 60 - - - - -	35.57 ₂	39.7 ₂	
	Ay. 72 - - - - -	35.52 ₂	39.2 ₂	
	Ad. - - - - -	35.56	39.5	
7590	Mädl. - - - - -	21 41 7.88	16 37 6.8	The assumed P. M. in decl. — 0''.03 represents D'Ag. to — 0'.6 (2 obs.); Lal. to + 0'.6 (1 obs.).
	Arm. - - - - -	8.11 ₂	3.0	
	Jac. - - - - -	7.91	3.0	
	Yarn. - - - - -	7.97 ₂	2.7 ₂	
	R. C ₂ - - - - -	8.26	0.6	
	Q. - - - - -	7.94	2.1 ₁	
	Ay. 64 - - - - -	7.99	1.8	
	Smyth - - - - -	8.06	1.7	
	Ad. - - - - -	8.00	2.1	
7606	Mädl. - - - - -	21 44 11.90	16 42 21.1	
	Arm. - - - - -	11.70	19.0	
	Q. - - - - -	11.80	18.7 ₁	
	Main - - - - -	11.98	19.2	
	Ay. 64 - - - - -	11.76	19.0	
	Ay. 72 - - - - -	11.84	18.6	
	Wn. 73 - - - - -	11.79	18.7	
	Ad. - - - - -	11.82	18.9	
7641	Mädl. - - - - -	21 50 50.78	11 29 0.8	
	Arm. - - - - -	50.70	1.5	
	Yarn. - - - - -	50.77	3.2	
	Kbg. - - - - -	50.65 ₂	1.7 ₂	
	Main - - - - -	50.77	1.4	
	Ay. 72 - - - - -	50.65	0.7	
	Wn. 73 - - - - -	50.65	0.2	
	Ad. - - - - -	50.71	1.3	
7664	St. - - - - -	21 54 60.02	12 31 19.2	
	Ay. 72 - - - - -	59.97	19.0	
	Pulc. - - - - -	59.98	18.2	
	Ad. - - - - -	59.99	18.8	
7674	Mädl. - - - - -	21 57 11.02	10 47 1.3	
	Arm. - - - - -	10.80 ₂	2.1	
	Challis - - - - -		0.6	
	Ay. 64 - - - - -	10.99	1.0	
	Main - - - - -	11.11	0.2	
	Ad. - - - - -	10.98	0.9	

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
7742	Tayl. - - - - -	22 5 49.14	15 25 32.4	P. M. in decl. assumed zero; C.—o. D'Ag.—3''.4 (1 obs.); Lal.—2''.1 (2 obs.); Pi. +0''.3 (13 obs.)
	Arm. - - - - -	49.22	31.4	
	Q. - - - - -	48.97 ₂	30.5 ₁	
	Main - - - - -	49.16	31.3	
	Ay. 72 - - - - -	49.12	31.3	
	Ad. - - - - -	49.13	31.5	
7796	St. - - - - -	22 15 21.90	11 34 33.6	
	Kbg. - - - - -	21.94 ₂	33.9 ₃	
	Yarn. - - - - -	21.89 ₂	32.6	
	Ay. 72 - - - - -	21.92	34.3	
	Wn. 73 - - - - -	21.88	34.2	
	Pule. - - - - -	21.92	33.8	
	Ad. - - - - -	21.91	33.7	
7856	Mädl. - - - - -	22 26 33.14	19 35 10.9	
	Arm. - - - - -	33.10	11.5	
	Q. - - - - -	32.98 ₂	10.8 ₃	
	R. C. ₂ - - - - -	33.08	12.1	
	Ay. 64 - - - - -	33.10	10.8	
	Yarn. - - - - -	33.12	12.0 ₃	
	Ay. 72 - - - - -	33.09	11.4	
	Ad. - - - - -	33.09	11.4	
7893	Mädl. - - - - -	22 32 49.62	18 52 34.4	
	Arm. - - - - -	49.61	34.6	
	Q. - - - - -	49.69 ₁	32.6 ₃	
	Kbg. - - - - -	49.57 ₂	34.4 ₃	
	Main - - - - -	49.75	33.6	
	Ay. 64 - - - - -	49.68	33.2	
	Ay. 72 - - - - -	49.69	32.9	
	Ad. - - - - -	49.66	33.6	
7900	Mädl. - - - - -	22 33 43.69	19 1 52.7	
	Arm. - - - - -	43.68	52.3	
	Main - - - - -	43.70	51.2	
	Ay. 64 - - - - -	43.72	50.8	
	Ad. - - - - -	43.70	51.4	
7908	St. - - - - -	22 35 13.63	10 10 45.9	Most of the separate values have double weight, or weight 1½.
	Arm. - - - - -	13.67	46.6	
	R. C. ₂ - - - - -	13.60	44.9	
	Yarn. - - - - -	13.63	45.8	
	Q. - - - - -	13.57	45.6	
	Ay. 64 - - - - -	13.64	45.9	
	Main 65 - - - - -	13.58	46.2	
	Arg. - - - - -	13.74	45.6	
	Eng. - - - - -	13.69	46.1	
	Wn. 70 (67) - - - - -	-	45.7	
	Leid. - - - - -	-	45.9	
	Ay. 70 - - - - -	13.64	46.2	
	Main 70 - - - - -	13.60	46.0	
	Ad. - - - - -	13.64	45.9	
7912	Tayl. - - - - -	22 35 [46.64]	13 51 52.6 ₃	Lalande gives decl. 50''.8; Pi. gives decl. 50''.9.
	Arm. - - - - -	47.01	51.3	
	Main - - - - -	47.15	50.8	
	Ay. 73 - - - - -	47.20 ₁	51.8 ₁	
	Ad. - - - - -	47.10	51.5	
7937	Mädl. - - - - -	22 39 23.36	18 42 29.2	
	Arm. - - - - -	23.38	31.1	
	R. C. ₂ - - - - -	23.30	30.3	
	Q. - - - - -	23.29	29.0 ₃	
	Ay. 64 - - - - -	23.34	28.2	
	Wn. 72 - - - - -	23.45 ₂	28.4	
	Ad. - - - - -	23.35	29.4	
7943	Mädl. - - - - -	22 40 26.75	11 31 56.6	
	Arm. - - - - -	26.86	56.2	
	Q. - - - - -	26.86	57.3	
	Ay. 60 - - - - -	26.83	57.2	
	R. C. ₂ - - - - -	26.84	56.2	
	Kbg. - - - - -	27.03 ₂	56.8 ₃	
	Ay. 64 and 71 - - - - -	26.84 ₃	56.3 ₃	
	Yarn. - - - - -	26.83 ₃	57.1 ₂	
	Ad. - - - - -	26.85	56.7	

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
7964	C. A. - - - - -	22 45 11.05	13 18 3.1	P. M. used + 0".026 + 0".23; C. A. gives + 0".020 + 0".28 as a first approximation from Lalande.
	Jac. - - - - -	10.99	4.2	
	Main - - - - -	11.07	1.9	
	Q. - - - - -	.	2.3 ₁	
	Ad. - - - - -	11.04	3.0	
7975	Tayl. - - - - -	22 46 53.25	16 10 42.7	The P. M. assumed in decl. is zero, which agrees very closely with P ₁ , but differs — 5".0 (C. — O.) from D'Agelet.
	Arm. - - - - -	53.12	42.0	
	Kbg. - - - - -	53.14 ₁	41.8 ₁	
	Main - - - - -	53.18	42.5	
	Ay. 73 - - - - -	53.13	42.1	
	Ad. - - - - -	53.17	42.3	
8003	Mädl. - - - - -	22 52 56.60	11 3 40.7	If Armagh is rejected the declination would be about 40".2.
	Arm. - - - - -	56.64	43.3	
	Yarn. - - - - -	56.56 ₂	42.3 ₂	
	Main - - - - -	56.76	39.0	
	Ay. 64 - - - - -	56.58	40.5	
	Q. - - - - -	.	38.9 ₁	
	Ad. - - - - -	56.63	40.9	
8034	St. - - - - -	22 58 32.12	14 31 59.7	
	R. C. ₂ - - - - -	32.11	58.4	
	Yarn. - - - - -	32.14	59.4	
	Ay. 64 - - - - -	32.10	59.0	
	Main 65 - - - - -	32.07	58.7	
	Gylden - - - - -	.	58.6	
	Wn. 70 (67) - - - - -	.	59.4	
	Leid. - - - - -	.	58.4	
	Main 70 - - - - -	32.07	58.9	
	Ay. 70 - - - - -	32.10	59.6	
	Ad. - - - - -	32.07	59.0	
8147	Mädl. - - - - -	23 16 32.62	19 52 28.6	The proper motion in declination seems to be very exactly zero.
	Arm. - - - - -	[32.81]	28.1	
	Jac. - - - - -	32.42	26.5	
	R. C. ₂ - - - - -	32.52	25.9	
	Ay. 64 - - - - -	32.43	26.5	
	Smyth - - - - -	32.56	26.7	
	Main - - - - -	32.50	28.3	
	Ad. - - - - -	32.51	27.0	
8149	Mädl. - - - - -	23 16 46.32	11 37 44.9	
	Arm. - - - - -	46.26	43.7	
	Ay. 64 - - - - -	46.26	44.4	
	Main - - - - -	46.33	44.5	
	Ay. 71 - - - - -	46.29	44.3	
	Ad. - - - - -	46.29	44.2	
8182	St. - - - - -	23 22 50.01	12 4 15.6	
	Ay. 72 - - - - -	50.04	16.1	
	Wn. 73 - - - - -	50.01	16.6	
	Pule. - - - - -	50.03	15.9	
	Ad. - - - - -	50.02	16.0	
8222	Mädl. - - - - -	23 31 19.84	16 8 1.2	
	Arm. - - - - -	19.82	2.2	
	R. C. ₂ - - - - -	19.87	1.1	
	Ay. 64 - - - - -	19.90	1.3	
	Ad. - - - - -	19.86	1.5	
8227	Mädl. - - - - -	23 31 38.15	17 42 30.9	
	Arm. - - - - -	38.24	29.6	
	Kbg. - - - - -	38.10 ₁	29.5 ₁	
	Q. - - - - -	38.18 ₂	28.6 ₁	
	Ay. 64 - - - - -	38.16	28.8	
	Main - - - - -	38.27	29.5	
	Ay. 72 - - - - -	38.19 ₂	29.2	
	Ad. - - - - -	38.19	29.2	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
8247	Mädl. - - - - -	23	36	11.91	17	58	30.6	Proper motion assumed zero. Mädler's decl. is derived from one obs. of Lalande, without P. M. or S. C.; with the latter it becomes 27".9.
	Arm. - - - - -			12.00			28.6	
	Jac. - - - - -			11.70			27.2	
	Yarn. - - - - -			11.92 ₂			27.6	
	Q. - - - - -			11.95 ₁			26.6 ₁	
	Main - - - - -			12.04			27.0	
	Ay. 64 - - - - -			12.01			27.2	
	Smyth - - - - -			12.07			28.3	
	Ad. - - - - -			11.96			27.6	
8248	Mädl. - - - - -	23	36	23.23	15	38	32.8	
	Arm. - - - - -			23.25			31.7	
	Q. - - - - -			23.14			31.0 ₂	
	Main - - - - -			23.17			31.9	
	Ay. 64 - - - - -			23.15			31.2	
	Ay. 72 - - - - -			23.21			30.9	
	Ad. - - - - -			23.19			31.4	
8299	St. - - - - -	23	46	7.83	18	25	34.3	
	Ay. 71 - - - - -			7.76 ₁			35.5 ₁	
	Main - - - - -			7.75			34.3	
	Wn. 73 - - - - -			7.76			34.0	
	Pulc. - - - - -			7.83			34.1	
	Ad. - - - - -			7.80			34.3	
8300	Mädl. - - - - -	23	46	14.70	10	15	7.8	
	Hend. - - - - -						8.0	
	Ay. 64 - - - - -			14.63			6.5	
	Main - - - - -			14.55			7.5	
	Ad. - - - - -			14.63			7.3	
8335	Tayl. - - - - -	23	53	24.01	10	34	37.8	Pi. gives decl. 36".6; D'Ag. gives 37".9 (1. obs.). A slight P. M. in decl. is possible, but needs new observations to confirm it.
	Main - - - - -			24.01			37.5	
	Q. - - - - -			24.03 ₁			38.0 ₁	
	Wn. 73 - - - - -			23.97			39.4	
	Ad. - - - - -			24.00			38.2	
8370	Mädl. - - - - -	23	59	17.04	12	42	2.9	
	Arm. - - - - -			16.97 ₁			2.0	
	Yarn. - - - - -			16.97 ₂			1.7	
	Q. - - - - -			16.96 ₃			1.5 ₁	
	Main - - - - -			16.92			1.6	
	Ay. 64, 72 - - - - -			16.95			1.8	
	Wn. 73 - - - - -			16.95			2.0	
	Ad. - - - - -			16.97			2.0	
8	Mädl. - - - - -	0	2	35.74	17	30	58.6	
	Hend. - - - - -					31	2.0	
	Arm. - - - - -			35.66		31	0.8 ₂	
	R. C. ₂ - - - - -			35.71			1.3	
	Q. - - - - -			35.61 ₁			1.3 ₂	
	Ay. 64 - - - - -			35.63			1.3	
	Ad. - - - - -			35.66			1.4	
14	Mädl. - - - - -	0	3	36.71	10	26	59.6	
	Hend. - - - - -					27	0.1	
	Arm. - - - - -			36.87 ₁		27	2.2	
	Ay. 40 - - - - -					28	0.6	
	Q. - - - - -					27	0.6 ₁	
	Schj. - - - - -			36.82 ₁		26	59.8 ₁	
	Ad. - - - - -			36.78		27	0.8	
26	St. - - - - -	0	6	48.02	14	29	18.3	
	Y. - - - - -			48.03			18.7	
	R. C. ₂ - - - - -			48.00			[21.2]	
	Ay. 64 - - - - -							
	Gylden - - - - -						18.2	
	Main 65 - - - - -			47.95			19.3	
	Main 70 - - - - -			48.01			19.0	
	Ay. 70 - - - - -			48.00			19.0	
	Wn. 70 - - - - -						19.0	
	Leiden - - - - -						19.3	
	Ad. - - - - -			48.01			18.7	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
32	Mädl. - - - - -	0	8	8.28	19	30	44.0	
	Arm. - - - - -			8.14			41.7	
	Ay. 64 - - - - -			8.43			41.2	
	Main - - - - -			8.27			41.2	
	Leiden - - - - -			8.18			41.3	
	Ay. 70 - - - - -						41.4	
	Ad. - - - - -			8.26			41.4	
48	Mädl. - - - - -	0	10	18.85	13	13	18.6	
	Arm. - - - - -			18.77			18.1	
	Ay. 64 - - - - -			18.75			19.1	
	Smyth - - - - -			18.87			19.1	
	Main - - - - -			18.69			19.8	
	Wn. 73 - - - - -			18.83			19.0	
	Ad. - - - - -			18.79			19.0	
55	Mädl. - - - - -	0	11	20.91	15	38	15.4	
	Arm. - - - - -			20.84 ₂			15.5	
	R. C. ₂ - - - - -			21.02 ₂			12.0	
	Ay. 64 - - - - -			20.75			13.8	
	Main - - - - -			20.75 ₁			14.8 ₁	
	Ad. - - - - -			20.86			13.9	
63	Mädl. - - - - -	0	13	28.63	15	33	26.1	
	Arm. - - - - -			28.77			24.1	
	Ay. 64 - - - - -			28.67			25.0	
	Main - - - - -			28.91 ₂			25.8	
	Ay. 72 - - - - -			28.88 ₂			25.8	
	Ad. - - - - -			28.76			25.2	
73	Mädl. - - - - -	0	15	57.43	12	47	16.3	
	Arm. - - - - -			57.56			18.1	
	Q. - - - - -			57.51 ₂			17.0 ₂	
	R. C. ₂ - - - - -			57.59			18.2	
	Schj. - - - - -			57.38			17.7	
	Ay. 64 - - - - -			57.46			17.3	
	Ad. - - - - -			57.49			17.7	
82	Mädl. - - - - -	0	18	9.91	13	37	21.1	
	Arm. - - - - -			9.93			21.3	
	Ay. 64 - - - - -			9.97			20.9	
	Main - - - - -			9.91			22.0	
	Ay. 72 - - - - -			9.96			20.8	
	Ad. - - - - -			9.94			21.2	
91	Mädl. - - - - -	0	19	33.67	19	27	13.3	
	Arm. - - - - -			33.77			15.2	
	Yarn. - - - - -			33.59 ₂			14.6	
	Q. - - - - -			33.60 ₂			13.7	
	Ay. 64 - - - - -			33.59			14.9	
	Main - - - - -			33.71 ₂			14.4 ₂	
	Ad. - - - - -			33.66			14.6	
98	Mädl. - - - - -	0	21	0.94	15	19	57.5	
	Arm. - - - - -			1.15			59.4	
	Jac. - - - - -			0.98			58.1	
	R. C. ₂ - - - - -			1.19			57.2	
	Ay. 64 - - - - -			1.17			58.6	
	Smyth - - - - -			1.29			59.1	
	Ad. - - - - -			1.11			58.5	
99	Mädl. - - - - -	0	21	28.10	18	49	22.6	
	Arm. - - - - -			28.18			21.0	
	Ay. 64 - - - - -			28.24			21.7	
	Main - - - - -			28.09			21.6	
	Ad. - - - - -			28.15			21.4	
101	Mädl. - - - - -	0	21	32.09	17	12	4.2	
	Arm. - - - - -			32.03			[7.5]	
	R. C. ₂ - - - - -			32.07 ₂			0.5	
	Q. - - - - -			32.03			1.8	
	Ay. 64 - - - - -			32.05			1.5	
	Ad. - - - - -			32.05			1.3	

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
102	Mädl. - - - - -	0 21 43.12	15 45 14.3	
	Arm. - - - - -	43.00	15.6	
	Ay. 64 - - - - -	43.08	13.0	
	Main - - - - -	43.00	14.5	
	Yarn. - - - - -	43.03 ₂	14.3	
	Wn. 73 - - - - -	43.10	14.0	
	Ad. - - - - -	43.06	14.3	
116	Mädl. - - - - -	0 24 17.50	15 20 49.0	
	Arm. - - - - -	17.63	48.7	
	Ay. 64 - - - - -	17.54	49.2	
	Main 65 - - - - -	17.66	46.5	
	Yarn. - - - - -	17.62 ₂	56.0	
	Main 70 - - - - -	17.60	48.1	
	Wn. 73 - - - - -	17.59	48.3	
	Ad. - - - - -	17.61	48.5	
122	Mädl. - - - - -	0 25 6.15	15 19 56.6	
	Arm. - - - - -	6.15	54.7	
	Ay. 61 - - - - -	6.16	54.0	
	Main - - - - -	6.26 ₁	53.9	
	Yarn. - - - - -	6.25 ₂	54.9	
	Wn. 73 - - - - -	6.15	54.0	
	Ad. - - - - -	6.18	54.3	
130	Mädl. - - - - -	0 26 2.60	19 36 21.7	
	Arm. - - - - -	2.30	20.7	
	Yarn. - - - - -	2.33 ₂	19.7	
	R. C. ₂ - - - - -	2.56	21.3	
	Ay. 61 - - - - -	2.38	20.5	
	Ay. 72 - - - - -	2.39	20.2	
	Ad. - - - - -	2.43	20.5	
133	Mädl. - - - - -	0 27 6.83	19 44 39.0	I have used Mädler's P. M. in decl. +0".038. Bessel (König-berg) and Auwers do not well agree in declination.
	Arm. - - - - -	7.34 ₁	40.4	
	Yarn. - - - - -	7.22 ₂	37.9	
	Smyth - - - - -	7.36	38.3	
	Ay. 73 - - - - -	7.28	38.0	
	Ad. - - - - -	7.30	38.6	
142	Arm. - - - - -	0 28 26.74	12 41 2.1	A. R. uncertain. Piazzì reduced to 1875.0 gives decl. = 12° 11' 2".1. I have assumed P. M. = 0.
	Main - - - - -	26.57	1.7	
	Schj. - - - - -	26.20 ₁	2.2 ₁	
	Kbg. - - - - -	26.46 ₁	3.7 ₁	
	Ad. - - - - -	26.66	2.2	
149	Jac. - - - - -	0 29 26.18 ₂	12 31 27.8	P. M. adopted — 0".012, — 0".20.
	Arm. - - - - -	26.29	26.2 ₂	
	Yarn. - - - - -	26.30	27.4 ₂	
	R. C. ₂ - - - - -	26.36	28.5 ₁	
	Ay. 60 - - - - -	26.33	27.4	
	Q. - - - - -	26.31 ₂	25.9 ₂	
	Smyth - - - - -	26.36	27.1	
	Ay. 64 - - - - -	26.34 ₁	27.1 ₁	
	Ad. - - - - -	26.30	27.1	
156	Mädl. - - - - -	0 30 16.72	14 32 38.5	
	Arm. - - - - -	16.50	38.4	
	Ay. 45 - - - - -	16.62	37.6	
	Q. - - - - -	16.64 ₂	36.4 ₁	
	Ay. 72 - - - - -	16.67	36.1	
	Ad. - - - - -	16.63	37.3	
211	Mädl. - - - - -	0 40 0.57	14 47 37.4	
	Arm. - - - - -	0.59 ₂	36.2	
	Ay. 64 - - - - -	0.59	35.8	
	Main - - - - -	0.55	34.8	
	Wn. 73 - - - - -	0.49	36.3	
	Ad. - - - - -	0.56	35.8	

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
213	Mädl. - - - - -	0 40 30.14	11 17 29.9	
	Arm. - - - - -	30.32 ₂	28.3 ₁	
	Kbg. - - - - -	30.26 ₁	29.6 ₁	
	R. C. ₂ - - - - -	30.24 ₂	32.6 ₁	
	Ay. 60 - - - - -	30.27	30.2	
	Yarn. - - - - -	30.25 ₂	31.9 ₁	
	Ad. - - - - -	30.24	30.3	
214	Mädl. - - - - -	0 40 37.41	18 53 43.4	
	Arm. - - - - -	37.18 ₂	44.2 ₁	
	Ay. 64 - - - - -	37.44	42.1	
	Main - - - - -	37.42	42.5	
	Ay. 71 - - - - -	37.41	42.5	
	Ad. - - - - -	37.39	42.6	
223	Mädl. - - - - -	0 42 24.51	16 15 56.7	
	Arm. - - - - -	24.56 ₂	56.1	
	R. C. ₂ - - - - -	24.68	54.2	
	Ay. 64 - - - - -	24.65	55.3	
	Ad. - - - - -	24.60	55.2	
247	Mädl. - - - - -	0 47 58.02	18 30 37.5	Mädl. and Arm. omitted for A. R. The P. M. in A. R. is uncertain.
	Arm. - - - - -	58.16	37.3	
	Q. - - - - -	58.21 ₂	35.4	
	Ay. 64 - - - - -	58.20	36.9	
	Main - - - - -	58.26	36.8	
	Ay. 72 - - - - -	58.26	35.7	
	Wn. 73 - - - - -	58.31	36.7	
	Ad. - - - - -	58.25	36.5	
258	Hend. - - - - -	0 49 35.83	13 16 29.3	P. M. in declination omitted; it may be + 0''.03.
	Arm. - - - - -	35.71	29.8	
	Kbg. - - - - -	35.83 ₂	27.7 ₂	
	Main - - - - -	35.56 ₂	28.1	
	Ad. - - - - -	35.74	28.8	
269	Hend. - - - - -	0 51 21.10	13 1 11.5	There may be a P.M. in decl. of + 0''.04; it has not been used.
	Arm. - - - - -	21.10	12.1	
	Schj. - - - - -	21.00 ₂	12.3 ₁	
	Main - - - - -	21.25	11.8	
	Yarn. - - - - -	21.12	11.2 ₂	
	Ad. - - - - -	21.10	11.8	
305	Mädl. - - - - -	0 58 29.46	14 16 20.1	
	Arm. - - - - -	[29.27]	23.5 ₂	
	Ay. 64 - - - - -	29.50	23.8	
	Main - - - - -	29.51	22.2	
	Ay. 72 - - - - -	29.53	23.6	
	Ad. - - - - -	29.50	23.3	
316	Mädl. - - - - -	0 59 59.20	12 17 7.3	
	Arm. - - - - -	[58.99]	6.8	
	Ay. 64 - - - - -	59.12	7.0	
	Main - - - - -	59.09	7.6	
	Ad. - - - - -	59.14	7.2	
322	Mädl. - - - - -	1 1 14.96	20 4 27.5	
	Arm. - - - - -	15.00	26.0	
	Ay. 64 - - - - -	14.95	26.0	
	Yarn. - - - - -	15.00	24.1 ₂	
	Ad. - - - - -	14.98	25.5	
336	Mädl. - - - - -	1 3 8.40	18 59 27.8	
	Arm. - - - - -	8.32 ₂	28.3 ₁	
	Q. - - - - -	-	26.9 ₁	
	Main - - - - -	8.37	28.5	
	Ad. - - - - -	8.37	27.8	
341	Arm. - - - - -	1 3 [33.69]	15 0 30.7 ₂	A P. M. in A. R. of perhaps + 0''.010 is probable; it has not been used. Piazzzi gives decl. 15° 0' 30''.0 for 1875.0.
	R. C. ₂ - - - - -	33.79 ₂	28.6	
	Ay. 60 - - - - -	33.83	29.7 ₈	
	Yarn. - - - - -	33.97 ₂	28.9 ₁	
	Ad. - - - - -	33.86	29.5	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
370	Mädl. - - - - -	1	7	29.22	15	28	17.2	
	Arm. - - - - -			29.04 ₂			16.0	
	Ay. 64 - - - - -			29.22			16.2	
	Main - - - - -			29.25			16.9	
	Ad. - - - - -			29.19			16.4	
413	Mädl. - - - - -	1	17	7.94	17	9	58.2	
	Arm. - - - - -			7.99 ₁			58.3	
	Ay. 64 - - - - -			7.91			58.5	
	Main - - - - -			7.97			58.6	
	Ad. - - - - -			7.94			58.5	
427	Mädl. - - - - -	1	19	20.95	18	31	17.1	This position Ay. 68 is derived from that given in Ay. 64, combined with an observation made in 1871.
	Arm. - - - - -			30.99			14.2 ₂	
	Ay. 60 - - - - -			31.04 ₉			16.0 ₉	
	Q. - - - - -			31.06			17.4 ₂	
	Yarn. - - - - -			31.05			16.4 ₂	
	Main - - - - -			31.17			16.6	
	Ay. 68 - - - - -			31.09			15.6 ₃	
	Ad. - - - - -			31.05			16.2	
430	Mädl. - - - - -	1	19	37.68	19	25	17.6	
	Arm. - - - - -			37.62			17.1	
	Kbg. - - - - -			37.70 ₁			15.9 ₁	
	Main - - - - -			37.73			16.3	
	Ad. - - - - -			37.68			16.8	
431	Mädl. - - - - -	1	19	56.66	18	35	32.7	
	Arm. - - - - -			56.59			31.2 ₂	
	Ay. 60 - - - - -			56.70			32.0	
	Q. - - - - -			56.71 ₁			30.8 ₂	
	Yarn. - - - - -			56.73 ₂			32.7	
	Ay. 71 - - - - -			56.70 ₁			30.7 ₁	
	Wn. 72 - - - - -			56.78			30.9	
	Ad. - - - - -			56.69			31.4	
439	Hend. - - - - -	1	21	40.89	16	25	56.5	I have used a P. M. in A. R. of +0°.008. The data in declination are discordant. Piazzì gives 55".7 without P. M. The star needs reobservation.
	Arm. - - - - -			40.82 ₂			54.2	
	Yarn. - - - - -			40.99			54.1 ₁	
	Main - - - - -			40.99			52.8	
	Ad. - - - - -			40.93			54.4	
446	Mädl. - - - - -	1	23	8.12	17	42	34.0	The Armagh A. R. omitted; one observation only made in 1832. Bradley has no declination.
	Arm. - - - - -						32.1 ₂	
	Ay. 64 - - - - -			8.11			31.8	
	Main - - - - -			8.10			30.0	
	Ad. - - - - -			8.11			31.2	
453	St. - - - - -	1	24	47.74	14	42	2.0	
	Y. - - - - -			47.74			2.9	
	Ay. 64 - - - - -			47.75			2.8	
	Main 65 - - - - -			47.71			2.6	
	Main 70 - - - - -			47.77			2.6	
	Ay. 70 - - - - -			47.74			2.8	
	Wn. 70 - - - - -						2.8	
	Ad. - - - - -			47.74			2.8	
454	R. C ₂ . - - - - -	1	25	6.15 ₂	10	14	38.2	
	Yarn. - - - - -			6.29 ₂			37.6 ₂	
	Ad. - - - - -			6.27			37.9	
455	P. M. - - - - -	1	25	19.18	16	18	33.2	Mädler's P. M. has been used; it seems nearly correct.
	Jac. - - - - -			19.03			30.8	
	Sabier - - - - -			19.11 ₂			32.2 ₂	
	Arm. - - - - -			19.09 ₂			32.3	
	Ay. 64 - - - - -			19.05			33.6	
	Smyth - - - - -			19.03 ₁			32.6	
	Main - - - - -			19.06			34.4	
	Ad. - - - - -			19.08			32.8	
459	Arm. - - - - -	1	25	55.66 ₁	11	14	19.0 ₂	Lalande's decl. for 1875.0 is 11° 14' 17".5 from two obs., which differ 3".7. I have assumed no P. M.
	Smyth - - - - -						19.8 ₂	
	Main - - - - -			55.61 ₂			21.2 ₂	
	Ad. - - - - -			55.63			20.0	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>c</i>	<i>l</i>	<i>"</i>	
469	Arg. 17-250 - - - - -	1	28	3.72	17	49	16.6	Argelander's P. M. has been used.
	R. C. ₂ - - - - -			3.53			15.7	
	Yarn. - - - - -			3.59 ₂			18.0 ₂	
	Ay. 72 - - - - -			3.36			17.6	
	Ad. - - - - -			3.55			16.9	
470	Mädl. - - - - -	1	28	13.11	11	55	5.6	
	Arm. - - - - -			13.15			5.2 ₂	
	Ay. 64 - - - - -			13.20			4.4	
	Main - - - - -			13.17			4.1	
	Ad. - - - - -			13.16			4.8	
476	Mädl. - - - - -	1	29	5.61	14	1	19.0	The position Ay. is combined from both catalogues, 1860 and 1864. There is but one obs. in the latter.
	Arm. - - - - -			[5.36]			18.3 ₂	
	Kbg. - - - - -			5.69			17.3	
	Ay. - - - - -			5.51 ₈			18.1 ₈	
	Yarn. - - - - -			5.48			17.1 ₂	
	Wn. 72 - - - - -			5.54			17.7	
	Ad. - - - - -			5.56			17.7	
477	Hend. - - - - -	1	29	8.70	16	47	34.6	
	Q. - - - - -			8.91 ₃			34.0	
	R. C. ₂ - - - - -			8.88			33.1	
	Ay. 60 - - - - -			8.92			35.7	
	Ay. 64 - - - - -			8.96 ₂			34.9 ₃	
	Yarn. - - - - -			8.82			35.8 ₂	
	Ad. - - - - -			8.86			34.6	
488	Mädl. - - - - -	1	30	28.37	11	30	6.3	
	Q. - - - - -			28.31			4.6 ₂	
	R. C. ₂ - - - - -			28.35			5.0	
	Yarn. - - - - -			28.40 ₁₅			5.4	
	Ay. 60 - - - - -			28.38 ₁₂			5.5 ₁₂	
	Ay. 64 - - - - -			28.41			5.6	
	Main - - - - -			28.35			4.6 ₁	
	Wn. 72 - - - - -			28.43			5.5	
	Ad. - - - - -			28.38			5.3	
490	Mädl. - - - - -	1	31	1.87	11	26	23.6	Bradley (Auwers) has no declination. I have adopted Mädler's P. M. Airy's place is combined; one observation in the catalogue for 1860, and three in that for 1864.
	Arm. - - - - -			1.87			25.8 ₂	
	Q. - - - - -			1.78 ₂			23.8	
	R. C. ₂ - - - - -			1.80			23.8 ₂	
	Ay. - - - - -			1.75			23.6	
	Ad. - - - - -			1.82			24.0	
495	Mädl. - - - - -	1	32	31.11	15	59	25.3	
	Arm. - - - - -			31.16 ₁			24.5	
	Yarn. - - - - -			31.18 ₂			25.8	
	Ad. - - - - -			31.14			25.2	
496	Mädl. - - - - -	1	32	33.58	13	39	3.3	
	Q. - - - - -			33.76 ₁			2.0 ₂	
	Kbg. - - - - -			33.71 ₂			4.4 ₂	
	Ay. 64 - - - - -			33.67			1.5	
	Main - - - - -			33.72 ₂			2.4 ₂	
	Ad. - - - - -			33.66			2.4	
500	Mädl. - - - - -	1	32	56.16	15	46	15.2	
	Ay. 60 - - - - -			56.27 ₈			14.9 ₂	
	Ay. 64 - - - - -			56.24 ₂			15.1 ₂	
	Main - - - - -			56.24			14.3	
	Yarn. - - - - -			56.21 ₂			16.0 ₂	
	Ay. 72 - - - - -			56.28			14.9	
	Ad. - - - - -			56.23			15.0	
523	Mädl. - - - - -	1	35	42.84	19	39	36.2	
	Arm. - - - - -			42.81			[41.1]	
	R. C. ₂ - - - - -			42.70 ₂			36.5	
	Ay. 60 - - - - -			42.84			36.2	
	Yarn. - - - - -			42.80 ₂			35.4 ₂	
	Ad. - - - - -			42.80			36.1	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
524	Jac. - - - - -	1	35	[42.84]	15	8	48.6	Lalande (2 obs.) gives for 1875.0 A. R. 1 ^h 35 ^m 42 ^s .98; decl. 15° 8' 48 ^{''} .1.
	Yarn. - - - - -			43.03 ₂			46.9 ₂	
	Smyth - - - - -						48.2 ₂	
	Main - - - - -			43.18 ₂			48.7 ₂	
	Q. - - - - -			43.01 ₁			48.0 ₂	
	Ad. - - - - -			43.08			48.1	
533	Mädl. - - - - -	1	38	6.16	19	27	30.5	
	Arm. - - - - -			6.15			28.8	
	Ay. 60 - - - - -			6.26			29.9	
	Main - - - - -			6.26			30.3	
	Yarn. - - - - -			6.24 ₂			29.2 ₂	
	Ad. - - - - -			6.21			29.6	
538	Mädl. - - - - -	1	39	48.09	16	47	8.6	Mädler included in declination.
	Arm. - - - - -			48.12			9.2	
	Smyth - - - - -			[48.35]			9.6	
	Ad. - - - - -			48.11			9.1	
542	Ay. 50 - - - - -	1	40	31.27	10	13	8.2	Pi. gives 7 ^{''} .4 in decl. for 1875.0.
	Yarn. - - - - -			31.30 ₂			7.4 ₂	
	Ad. - - - - -			31.28			7.9	
546	Mädl. - - - - -	1	41	24.33	16	19	57.7	I have transferred to this star Yarnall's A. R. of the following.
	Arm. - - - - -			[24.55]			57.1	
	Ay. 64 - - - - -			24.21			56.4	
	Q. - - - - -			24.22 ₂			55.8 ₂	
	Main - - - - -			24.33			55.8	
	Yarn. - - - - -			24.20			57.8 ₂	
	Ad. - - - - -			24.26			56.6	
549	Mädl. - - - - -	1	41	34.72	16	23	49.0	Bradley has no declination. The P. M. used in that element is Mädler's, which agrees well with Piazz. His declina- tion for 1875.0 becomes 16° 23' 47 ^{''} .9 if brought up by it.
	Arm. - - - - -			34.73			50.0	
	Yarn. - - - - -						48.7	
	Q. - - - - -			34.55 ₂			46.9 ₂	
	Ay. 64 - - - - -			34.58 ₂			47.8 ₂	
	Main - - - - -			34.68			47.1	
	Ad. - - - - -			34.66			48.2	
561	Mädl. - - - - -	1	44	14.02	10	25	23.6	
	Arm. - - - - -			13.93			24.6	
	Yarn. - - - - -			14.13			25.2	
	Ay. 60 - - - - -			14.05			24.6	
	Kbg. - - - - -			14.08			23.8	
	Q. - - - - -			13.96 ₁			24.4 ₂	
	Ad. - - - - -			14.03			24.5	
572-3	St. - - - - -	1	46	40.37	18	40	53.0	I have reduced St. both by systematic correction (+0 ^{''} .4), and to the middle point between the two stars. For either star add ± 4 ^{''} .3 to the declina- tion.
	Arm. - - - - -			40.51 ₁			53.3	
	R. C. ₂ - - - - -			40.38			51.9	
	Yarn. - - - - -			40.36			53.2 ₂	
	Main - - - - -			40.34			50.9	
	Ad. - - - - -			40.36			52.5	
592	Mädl. - - - - -	1	50	31.43	17	12	23.4	
	Q. - - - - -			31.41 ₁₀			23.6	
	Yarn. - - - - -			31.40 ₂			23.4	
	Ay. 60 - - - - -			31.41			23.1	
	Ay. 64 - - - - -			31.42 ₂			22.8	
	Ay. 72 - - - - -			31.43			22.5	
	Ad. - - - - -			31.42			23.1	
609	Hend. - - - - -	1	52	44.56	11	41	14.3	P. M. in declination used — 0 ^{''} .05, from Piazz.
	Yarn. - - - - -			44.54 ₂			14.2 ₂	
	Main - - - - -			44.40			14.7	
	Ay. 70 - - - - -			44.44			15.0	
	Ad. - - - - -			44.48			14.3	

No.	Authority.	Right ascension.	Declination.	Remarks.
629	Hend. - - - - -	<i>h. m. s.</i> 1 56 17.42	<i>° ' "</i> 10 24 56.2	
	Arm. - - - - -	17.55 ₁	57.2	
	Q. - - - - -	17.52 ₂	54.8 ₁	
	R. C. ₂ - - - - -	17.53	54.5 ₁	
	Ad. - - - - -	17.49	56.0	
632	Arm. - - - - -	1 56 51.32	17 39 7.3 ₂	
	Q. - - - - -	51.22 ₁	5.6 ₂	
	Ay. 60 - - - - -	51.47	6.0	
	Ay. 64 - - - - -	51.39	5.6	
	Main - - - - -	51.47	6.2	
	Ay. 72 - - - - -	51.44	5.6	
	Ad. - - - - -	51.42	6.0	

DETAILS OF POSITIONS—DIVISION II.

BRITISH ASSOCIATION CATALOGUE STARS.

FROM $+20^{\circ}$ TO $+30^{\circ}$ DECLINATION.

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h.</i> <i>m.</i> <i>s.</i>	<i>°</i> <i>'</i> <i>"</i>	
4100	Tayl. - - - - -	12 4 [25.23]	27 58 38.2	The P. M. used ($-0''.05$) in decl. was determined by comparison with Piazz.
	Yarn. - - - - -	24.95 ₂	37.4	
	Ay. 64.68 - - - - -	24.97	38.2	
	Main - - - - -	24.89	38.1	
	Ad. - - - - -	24.93	38.0	
4107	Mädl. - - - - -	12 5 30.54	26 34 0.5	
	Arm. - - - - -	30.36	0.4	
	Ay. 60 - - - - -	30.59	0.1	
	Main - - - - -	30.57	0.8	
	Ay. 72 - - - - -	30.45 ₁	0.6	
	Ad. - - - - -	30.51	0.5	
4110	Mädl. - - - - -	12 5 [47.28]	21 14 18.4	Mädler's A. R. and P. M. in A. R. have been omitted.
	Arm. - - - - -	47.82	18.8	
	Ay. 64 - - - - -	47.81	17.1	
	Main - - - - -	47.82	18.6	
	Ad. - - - - -	47.82	17.8	
4127	Mädl. - - - - -	12 10 1.03	24 38 27.3	The declinations of Ay. have each had wt. = 1 $\frac{1}{2}$.
	Arm. - - - - -	0.98 ₂	24.3	
	Ay. 60 - - - - -	0.86	25.6	
	Ay. 64 - - - - -	0.97	25.2	
	Ay. 70 - - - - -	0.98	25.2	
	Ad. - - - - -	0.96	25.5	
4139	Arm. - - - - -	12 12 . .	26 42 11.3 ₂	The P. M. used ($-0''.03$) was obtained by comparison with Piazz.
	Q. - - - - -	43.71 ₂	10.0 ₂	
	Main - - - - -	43.71	11.1	
	Ad. - - - - -	43.71	10.8	
4141	Mädl. - - - - -	12 13 0.50	23 43 45.5	
	Yarn. - - - - -	0.25	43.9	
	Ay. 60 - - - - -	0.30 ₂	45.6	
	Main - - - - -	0.36 ₂	44.8	
	Ay. 73 - - - - -	. .	45.2	
	Ad. - - - - -	0.36	44.9	
4142	Mädl. - - - - -	12 13 13.74	28 51 19.0	
	Arm. - - - - -	13.76	20.5	
	R. C. ₂ - - - - -	13.76	19.3	
	Bonn. - - - - -	13.74	19.2	
	Ay. 64 - - - - -	13.79	19.6	
	Ad. - - - - -	13.76	19.6	
4147	Mädl. - - - - -	12 13 [33.56]	29 9 34.1	
	Hend. - - - - -	. .	32.5	
	Arm. - - - - -	33.19 ₁	[34.7]	
	R. C. ₂ - - - - -	33.35 ₂	29.5 ₂	
	Ay. 64 - - - - -	33.30	31.5	
	Q. - - - - -	33.33 ₂	31.0 ₂	
	Ad. - - - - -	33.30	31.3	
4152	Tayl. - - - - -	12 14 [1.83 ₂]	26 41 43.5	P. M. used $+0''.03$; from Piazz. Both co-ordinates are uncertain. Main 73 gives 1 $^{\circ}$.09, 42 $^{\circ}$.7.
	Arm. - - - - -	. .	46.5 ₂	
	Q. - - - - -	1.40 ₂	43.0 ₂	
	Main - - - - -	1.22 ₂	43.8 ₂	
	Ad. - - - - -	1.31	44.1	
4153	Jac. - - - - -	12 14 2.42	27 19 5.6	If a P. M. of $-0''.13$, indicated by Lal., is correct, the decl. for 1875.0 will be 27 $^{\circ}$ 19' 2 $''$.0. New observations are much needed.
	Yarn. - - - - -	2.53 ₂	3.4	
	Main - - - - -	2.49	4.3	
	Smyth - - - - -	2.64	2.6	
	Ad. - - - - -	2.52	4.0	
4169	Mädl. - - - - -	12 16 13.19	26 32 24.8	
	Arm. - - - - -	13.13	23.9	
	Ay. 60 - - - - -	13.22	24.8	
	Yarn. - - - - -	13.19	25.1 ₂	
	Ay. 72 - - - - -	. .	24.1	
	Ad. - - - - -	13.18	24.5	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
4178	Tayl. - - - - -	12	17	47.03	26	32	41.1	Lal. gives P. M. $-0''.04$ } Used 0. Simi- Pi. " " $+0''.01$ } larly in A. R.
	Arm. - - - - -			47.05 ₁			41.7	
	Main - - - - -			46.98			40.8	
	Ad. - - - - -			47.01			41.2	
4181	Mädl. - - - - -	12	18	2.19	26	47	31.2	Pulcova 1841 gives $31''.1$.
	Arm. - - - - -			2.09			30.7	
	Ay. 50 - - - - -						31.4 ₂	
	Ay. 60 - - - - -			2.27			31.1	
	Q. - - - - -			2.13 ₂			30.9	
	Ad. - - - - -			2.17			31.0	
4184	Arm. - - - - -	12	18	57.62	24	37	13.	The approximate P. M. used ($+0''.005$ $-0''.05$) was obtained by comparison with Piazz.
	R. C. ₂ - - - - -			57.69			12.7	
	Q. - - - - -			57.68			12.9	
	Kbg. - - - - -			57.89 ₁			15.5 ₂	
	Ay. 64 - - - - -			57.70			12.4	
	Yarn. - - - - -			57.63 ₂			14.0	
	Ay. 72 - - - - -			57.70			13.7	
	Ad. - - - - -			57.69			13.4	
4191	Mädl. - - - - -	12	20	8.90	27	57	39.6	
	Arm. - - - - -			8.99			39.4	
	Ay. 60 - - - - -			8.96			39.3	
	Kbg. - - - - -			8.93			39.5	
	Ay. 64 - - - - -			8.88			39.1	
	Ad. - - - - -			8.93			39.3	
4195	Mädl. - - - - -	12	20	42.47	28	57	48.0	Airy 71 includes observations made in 1872 and 1873 with the catalogue place 1864.
	Arm. - - - - -			42.31			48.8	
	R. C. ₂ - - - - -			42.39			48.9	
	Ay. 60 - - - - -			42.37			48.9	
	Kbg. - - - - -			42.12 ₁			48.8 ₁	
	Q. - - - - -			42.18 ₂			48.0 ₁	
	Main - - - - -			42.43			49.8	
	Ay. 71 - - - - -			42.34			48.7	
	Ad. - - - - -			42.35			48.9	
4196	Mädl. - - - - -	12	20	44.30	27	31	6.8	Mädler's P. M. in A. R. was omitted in reducing the other authorities.
	Arm. - - - - -			44.14			5.1 ₂	
	Kbg. - - - - -			44.46 ₂			4.4 ₂	
	Ay. 60 - - - - -			44.21			5.8	
	Q. - - - - -			44.12			5.1	
	Ay. 64 - - - - -			44.18 ₂			5.8 ₂	
	Yarn. - - - - -			44.11 ₁			4.0 ₂	
	Ad. - - - - -			44.22			5.1	
4199	Mädl. - - - - -	12	21	23.23	26	36	16.2	I have omitted Mädler's P. M. in A. R. That in declination may, perhaps, be $-0''.08$, which would make the decl. $15''.1$. The star needs reobserving soon.
	Arm. - - - - -			23.29			18.2 ₂	
	Jac. - - - - -			[22.87]			15.4	
	R. C. ₂ - - - - -			23.09			16.2	
	Q. - - - - -			23.12			16.2	
	Ay. 64 - - - - -			23.21			16.3	
	Smyth - - - - -			23.23			16.0	
	Main - - - - -			23.17			17.0	
	Ad. - - - - -			23.19			16.4	
4205	Jac. - - - - -	12	22	23.46	26	55	8.0	
	Ay. 50 - - - - -						8.2 ₂	
	Ay. 60 - - - - -			23.53			8.6 ₁₂	
	Q. - - - - -			23.41 ₂			8.4 ₂	
	Smyth - - - - -			23.53			9.0	
	Main - - - - -			23.54			7.0	
	Ad. - - - - -			23.51			8.3	
4206	Mädl. - - - - -	12	22	[30.16]	26	35	32.9	
	Arm. - - - - -			29.87			31.2	
	Q. - - - - -			29.79			30.2	
	Ay. 64 - - - - -			29.93			30.5	
	Main - - - - -			29.81			29.6	
	Ad. - - - - -			29.85			30.4	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
4207	Mädl. - - - - -	12	22	40.19	26	36	17.6	
	Arm. - - - - -			40.13			18.2	
	Q. - - - - -			40.06			19.9	
	Ay. 64 - - - - -			40.16			19.2	
	Main - - - - -			40.10			18.7	
	Ad. - - - - -			40.13			19.0	
4209	Mädl. <i>corrected</i> - - - - -	12	23	11.86	24	48	1.5	
	Arm. - - - - -			11.74			1.0	
	Q. - - - - -			11.66 ₁			1.0 ₂	
	Ad. - - - - -			11.77			1.2	
4212	St. - - - - -	12	23	26.52	21	35	19.0	
	R. C. ₂ - - - - -			26.48			18.2 ₂	
	Yarn. - - - - -			26.37			18.8	
	Q. - - - - -						18.0 ₂	
	Pulc. - - - - -			26.42			18.4	
	Ad. - - - - -			26.46			18.6	
4223	Mädl. - - - - -	12	24	46.14	25	15	28.6	
	Arm. - - - - -			46.12 ₂			30.8	
	Ay. 64 - - - - -			45.96			30.3	
	Main 65 - - - - -			45.98			29.3	
	Wn. 67 - - - - -			45.92			30.7	
	Ay. 72 - - - - -						31.1 ₂	
	Ad. - - - - -			46.02			30.4	
4231	Jac. - - - - -	12	27	18.26	25	8	20.1	
	Smyth - - - - -			18.49			19.5	
	Main - - - - -			18.38			18.4	
	Q. - - - - -			18.39 ₁			19.3 ₁	
	Ad. - - - - -			18.38			19.3	
4232	Mädl. - - - - -	12	27	20.30	24	58	24.3	
	Arm. - - - - -			20.13			23.6	
	Yarn. - - - - -			20.31			22.6 ₁	
	Kbg. - - - - -			20.37 ₁			23.3 ₁	
	Ay. 64 - - - - -			20.31			23.4	
	Wn. 67 - - - - -			20.35			23.4	
	Main - - - - -			20.32			23.0	
	Ad. - - - - -			20.29			23.3	
4240	Arm. - - - - -	12	28	37.35	23	19	5.7 ₂	The Paris determination (as a fundamental star) has double weight. P. M. $\pm 0''.02$ from Piazz.
	R. C. ₂ - - - - -			37.34			3.8 ₂	
	Ay. 60 - - - - -			37.36			5.2	
	Q. - - - - -			37.29 ₁			3.2 ₂	
	Paris - - - - -			37.31			4.9	
	Ay. 64-71 - - - - -			37.24 ₁			5.4	
	Ad. - - - - -			37.32			4.8	
4260	Mädl. - - - - -	12	32	54.25	21	45	1.7	
	Arm. - - - - -			54.08			1.8	
	Ay. 64 - - - - -			54.13			1.4	
	Q. - - - - -			54.15			1.4	
	Main - - - - -			54.19			2.2	
	Ay. 72 - - - - -			54.07 ₂			1.6	
	Ad. - - - - -			54.15			1.7	
4304	Mädl. - - - - -	12	43	11.96	28	14	1.3	
	Arm. - - - - -			11.84			0.9 ₂	
	Ay. 50 - - - - -						0.8	
	Ay. 60 - - - - -						0.4 ₂	
	Ay. 64 - - - - -			11.94			0.8	
	Q. - - - - -			11.88 ₂			0.0	
	Ay. 72 - - - - -			11.99			1.6	
	Ad. - - - - -			11.92			0.8	
4315	Mädl. - - - - -	12	45	36.61	28	13	17.6	Ay. 64, 70, and Main received weights 2, 2, 1 $\frac{1}{2}$ in declination; 1 $\frac{1}{2}$, 1 $\frac{1}{2}$, 1 in A. R.
	Arm. - - - - -			36.46			17.4	
	Ay. 64 - - - - -			36.51			16.8	
	Q. - - - - -			36.55 ₂			16.6	
	Main - - - - -			36.49			16.6	
	Ay. 70 - - - - -			36.53			17.2	
	Ad. - - - - -			36.53			16.9	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
4328	Mädl. - - - - -	12	47	8.34	21	55	29.3	
	Arm. - - - - -			8.37			29.1	
	Ay. 50 - - - - -						30.0	
	Ay. 60 - - - - -			8.40			30.1	
	Ay. 72 - - - - -			8.36 ₂			30.6	
	Ad. - - - - -			8.37			30.0	
4364	Jac. - - - - -	12	55	27.93	21	56	36.0	Smyth received double weight in decl. P. M. uncertain and assumed = 0.
	Smyth - - - - -			28.05			36.4	
	Main - - - - -			28.02			35.3	
	Q. - - - - -			27.81 ₁			35.5 ₁	
	Ad. - - - - -			27.97			36.0	
4387	Mädl. - - - - -	13	0	15.80	21	49	28.1	
	Arm. - - - - -			15.70			29.1	
	Ay. 60 - - - - -			15.67			28.0	
	Q. - - - - -			15.44			27.3 ₂	
	Ay. 73 - - - - -			15.66 ₁			28.4	
	Ad. - - - - -			15.65			28.3	
4388	Mädl. - - - - -	13	0	17.60	23	17	17.6	
	Arm. - - - - -			17.61			15.7	
	Ay. 64 - - - - -			17.57			14.1	
	Main - - - - -			17.53			14.3	
	Wn. 67 - - - - -			17.53			14.7	
	Ad. - - - - -			17.57			14.7	
4390	Mädl. - - - - -	13	1	10.85	28	17	45.9	
	Arm. - - - - -			10.73			47.0 ₂	
	Ay. 50 - - - - -			10.84			45.9	
	Q. - - - - -			10.73			44.5	
	Ay. 64 - - - - -			10.77 ₂			45.7	
	Yarn. - - - - -			10.78			44.2 ₂	
	Ay. 70 - - - - -			10.79			46.2	
	Ad. - - - - -			10.78			45.6	
4393	Mädl. - - - - -	13	1	54.59	28	13	33.4	
	Arm. - - - - -			[54.17 ₁]			37.7 ₂	
	R. C. ₂ - - - - -			54.46			34.6	
	Q. - - - - -			54.55			34.7	
	Ay. 64 - - - - -			54.59			35.3	
	Ad. - - - - -			54.55			35.6	
4421	St. - - - - -	13	6	2.34	28	30	44.7	Smyth has had a weight 2 in decl. (41 observations).
	Q. - - - - -			2.36			43.4	
	Yarn. - - - - -			2.32 ₂			43.1	
	Smyth - - - - -			2.40			43.9	
	Ay. 72 - - - - -			2.33 ₁			44.5 ₁	
	Ad. - - - - -			2.34			44.1	
4513	Jac. - - - - -	13	24	56.32	24	52	56.8	
	Q. - - - - -			56.54 ₂			56.0 ₂	
	Ay. 64 - - - - -			56.58			56.6	
	Smyth - - - - -			56.69			56.9	
	Main - - - - -			56.53			57.6	
	Ad. - - - - -			56.53			56.8	
4526	Q. - - - - -	13	26	52.77 ₂	24	59	49.1	A possible P. M. of $-0''.18$ (Lal.) would give $24^{\circ} 59' 47''.7$ for 1875.0; but per- haps Lal. is $15''$ wrong. The P. M. confirmed by Wn. 1874.
	Smyth - - - - -			52.81			49.2	
	Wn. 67 - - - - -			52.83			49.2	
	Main - - - - -			52.83 ₂			49.5	
	Ad. - - - - -			52.81			49.3	
4553	Arm. - - - - -	13	32	6.62 ₁	23	10	4.6	The star's A. R. is uncertain and needs reobserving. I have used P. M. in decl. $-0''.06$ from Piazzi.
	Yarn. - - - - -			6.44 ₂			2.4	
	Q. - - - - -			6.45 ₁			3.0 ₂	
	Main - - - - -			6.48 ₂			3.3 ₁	
	Ad. - - - - -			6.49			3.4	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
4562	Mädl. - - - - -	13	34	42.17	20	35	20.2	Ay. 60-64 and Ay. 70 receive double weight.
	Arm. - - - - -			42.11			20.7	
	Q. - - - - -			42.20			19.8	
	Ay. 60-64 - - - - -			42.24			19.1	
	Wn. 67 - - - - -			42.21			19.8	
	Main - - - - -			42.24			19.8	
	Ay. 70 - - - - -			42.23			19.2	
	Ad. - - - - -			42.20			19.6	
4563	Ay. 40-45 - - - - -	13	34	42.77	20	38	48.6 ₂	P. M. in decl. used + 0''.05, from Piazz.
	Arm. - - - - -			42.78 ₂			49.3	
	Q. - - - - -			42.67			47.9	
	Main - - - - -			42.53			47.5 ₁	
	Ad. - - - - -			42.69			48.3	
4566	Mädl. - - - - -	13	35	7.55	23	7	50.2	
	Arm. - - - - -			7.47			47.6	
	Yarn. - - - - -			7.53			47.4	
	Ay. 64 - - - - -			7.49			47.2	
	Wn. 67 - - - - -			7.58			47.8	
	Main - - - - -			7.57			47.4	
	Ay. 73 - - - - -			-			47.2	
	Ad. - - - - -			7.53			47.4	
4575	Jac. - - - - -	13	37	50.65	23	19	53.7	P. M. in decl. used — 0''.02. See note to C. A. 310. Smyth's weight = 1½ in decl.
	Ay. 60 - - - - -						53.7 ₂	
	Ay. 64 - - - - -			50.80			52.7	
	Smyth - - - - -			50.86			53.6	
	Main - - - - -			50.75			53.3	
	Ad. - - - - -			50.76			53.4	
4594	Mädl. - - - - -	13	40	54.95	26	19	48.8	Weight of Ay. 72 = 1½ in decl.
	Arm. - - - - -			55.03			48.3	
	Yarn. - - - - -			55.01			47.4	
	Kbg. - - - - -			54.96 ₂			49.2 ₂	
	Ay. 72 - - - - -			55.01 ₁			48.6	
	Ad. - - - - -			54.99			48.3	
4618	Hend. - - - - -	13	43	48.35	21	53	7.4	The P. M. in A. R. (+0''.005) is taken from Argelander, XLVIII (Bonner Beob. VII, 129).
	Arm. - - - - -			48.16			8.0	
	R. C. ₂ - - - - -			48.26 ₁			6.5 ₂	
	Kbg. - - - - -			48.12 ₂			8.9 ₂	
	Yarn. - - - - -			48.17			7.5 ₂	
	Arg. - - - - -			48.22			6.8	
	Tiele - - - - -			48.25			7.0 ₂	
	Ay. 61 - - - - -			48.18			7.3	
	Ad. - - - - -			48.21			7.4	
4640	Arm. - - - - -	13	47	30.26	29	15	50.5	P. M. used — 0''.005, 0''.00.
	Yarn. - - - - -			30.14			48.7	
	Kbg. - - - - -			30.10 ₂			51.1 ₂	
	Main - - - - -			30.14			50.3	
	Wn. 67 - - - - -			30.16			50.8	
	Ad. - - - - -			30.16			50.2	
4656	Mädl. - - - - -	13	50	51.79	28	6	21.1	
	Arm. - - - - -			51.71			21.9	
	Ay. 60 - - - - -			51.78			21.0	
	Kbg. - - - - -			51.66 ₂			21.7 ₂	
	Ay. 64 - - - - -			51.71 ₂			20.0 ₂	
	Ay. 72 - - - - -			51.61 ₁			21.3	
	Ad. - - - - -			51.72			21.2	
4664	Mädl. - - - - -	13	52	47.59	22	18	23.8	
	Arm. - - - - -			47.55			23.6	
	Kbg. - - - - -			47.50 ₂			25.8 ₂	
	Ay. 64 - - - - -			47.53			24.7	
	Wn. 67 - - - - -			47.51			25.3	
	Main - - - - -			47.53			25.1	
	Ay. 72 - - - - -			47.51 ₁			24.8 ₁	
	Ad. - - - - -			47.53			24.9	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
4675	St. - - - - -	13	55	30.36	27	59	28.3	Weight of Main, $\frac{1}{4}$ in decl.; of St. and and Pulc., 2.
	Yarn. - - - - -			30.41 ₂			27.3 ₂	
	Wn. 67 - - - - -			30.43 ₂			29.1	
	Main - - - - -			30.41			28.0	
	Ay. 72 - - - - -						28.8	
	Pulc. - - - - -			30.40			27.9	
	Ad. - - - - -			30.39			28.2	
4706	St. - - - - -	14	4	41.94	25	41	4.9	Weight of Ay. 73 in decl., $1\frac{1}{2}$; of St. and Pulc., 2.
	Kbg. - - - - -			41.88 ₂			4.4 ₂	
	Yarn. - - - - -			41.93			4.9	
	Wn. 67 - - - - -			41.84			5.1	
	Pulc. - - - - -			41.84			4.9	
	Ay. 73 - - - - -			41.87			4.8	
	Ad. - - - - -			41.89			4.8	
4723	R. C. ₂ - - - - -	14	8	21.01 ₁	29	41	25.8 ₂	Smyth has a weight of 2 in decl. (22 obs.). The A. R. is uncertain; La- lande gives 22.42.
	Q. - - - - -			21.14 ₁			25.2 ₁	
	Smyth - - - - -			21.19			26.4	
	Ad. - - - - -			21.13			26.1	
4809	R. C. ₂ - - - - -	14	26	48.16	27	13	53.5 ₂	Both co-ordinates uncertain; decl. per- haps 51''.6 with P. M. of $-0''.08$ (Lal.); P. M. confirmed by B. Z., and finally adopted.
	Smyth - - - - -			48.46			51.7	
	Q. - - - - -			48.28			52.0 ₂	
	Wn. 67 - - - - -			[47.38 ₂]			52.9	
	Main - - - - -			48.23			52.0	
	Ad. - - - - -			48.28			52.4	
4810	Mädl. - - - - -	14	26	51.63	22	48	42.2	
	Arm. - - - - -			51.70			43.0	
	Yarn. - - - - -			51.62 ₂			39.6	
	Ay. 64 - - - - -			51.68			40.8	
	Kbg. - - - - -			51.57			42.0	
	Q. - - - - -			51.68			40.2	
	Main - - - - -			51.64			41.3	
	Wn. 67 - - - - -			51.92 ₂			40.1	
	Ad. - - - - -			51.67			41.0	
4864	Mädl. - - - - -	14	37	[55.98]	27	3	37.6	Mädler's P. M. in A. R. has been omitted.
	Yarn. - - - - -			55.69			35.9 ₂	
	Ay. 60 - - - - -			55.72			37.5	
	Kbg. - - - - -			55.70			40.6 ₂	
	Ay. 72 - - - - -			55.72 ₂			37.0	
	Ad. - - - - -			55.71			37.6	
4876	Arm. - - - - -	14	39	31.70	27	36	8.0	
	Yarn. - - - - -			31.68			7.4	
	Ay. 60 - - - - -			31.70			8.1	
	Ay. 64 - - - - -			31.68			7.9	
	Arg. - - - - -			31.67			8.1	
	Eng. - - - - -			31.63			7.0	
	Main 65 - - - - -			31.67			7.3	
	Paris - - - - -			31.64			8.7	
	Main 70 - - - - -			31.70			8.4	
	Leid. - - - - -						7.5	
	Ay. 70 - - - - -			31.66			8.0	
	Ad. - - - - -			31.67			7.9	
4902	Arm. - - - - -	14	44		29	8	3.7	The possible P. M. of $+0''.01$ to $0''.02$ (Piazzi) has been omitted.
	Ay. 40 - - - - -						4.3	
	Ay. 45 - - - - -			35.38			5.4	
	Yarn. - - - - -			35.42 ₂			3.5	
	Kbg. - - - - -			35.49 ₂			7.2 ₂	
	Q. - - - - -			35.46			4.2 ₂	
	Ay. 72 - - - - -			35.48 ₁			6.0 ₁	
	Ad. - - - - -			35.44			4.7	
4953	Mädl. <i>corrected</i> - - - - -	14	56	37.99	25	30	11.2	The P. D. of Ay. 1873 has been corrected by $-10''$.
	Arm. - - - - -			38.00			13.7	
	Yarn. - - - - -			37.94 ₂			10.7	
	Q. - - - - -			38.00			10.7 ₂	
	Ay. 73 - - - - -			38.07 ₁			12.4 ₁	
	Ad. - - - - -			37.99			11.7	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
4962	Müdl. - - - - -	14	58	26.50	27	34	33.8	The P. M. used in decl. ($-0''.04$) was from Piazz. Müdler's value, $+0''.209$, is quite wrong.
	Arm. - - - - -			26.52			15.4	
	R. C. ₂ - - - - -			26.44			15.3	
	Q. - - - - -			26.61 ₂			15.2 ₂	
	Ay. 64 - - - - -			26.58			15.7	
	Wn. 67 - - - - -			26.58			16.2	
	Ad. - - - - -			26.54			15.6	
4969	St. - - - - -	14	59	5.38	27	26	9.7	Weights for decl. in their order: 4, 1, 1, 2, 1 $\frac{1}{2}$, 2, 1 $\frac{1}{2}$, 2.
	Eng. - - - - -			5.46			10.2	
	R. C. ₂ - - - - -			5.35			8.9	
	Ay. 64 - - - - -			5.37			10.1	
	Main 65 - - - - -			5.39			10.5	
	Main 70 - - - - -			5.39			10.5	
	Ay. 70 - - - - -			5.37			10.1	
	Pule. - - - - -			5.37			9.6	
	Ad. - - - - -			5.38			10.0	
4981	Müdl. - - - - -	15	1	48.40	25	21	26.5	
	Arm. - - - - -			48.42			25.8 ₁	
	R. C. ₂ - - - - -			48.65			23.9 ₂	
	Q. - - - - -			48.63			25.1 ₂	
	Ay. - - - - -			48.59 ₂			24.4 ₂	
	Kbg. - - - - -			48.69 ₁			26.7 ₁	
	Yarn. - - - - -			48.69 ₂			25.8	
	Ad. - - - - -			48.57			25.2	
4991	Müdl. - - - - -	15	3	0.04	26	46	53.7	
	Arm. - - - - -		2	59.99			51.5 ₁	
	Ay. 50 - - - - -			-			52.3 ₂	
	Yarn. - - - - -		3	0.00 ₂			51.9 ₂	
	Q. - - - - -		2	59.89 ₁			51.8 ₂	
	Kbg. - - - - -		3	0.02 ₂			52.8 ₂	
	Ay. 72 - - - - -			0.01 ₁			52.1 ₁	
	Ad. - - - - -		3	0.00			52.1	
4993	Hend. - - - - -	15	3	-	25	35	17.8	Piazz. and Lal. indicate a P. M. of $+0''.015$ in decl., which has not been used. The star needs reobservation. Lalande (1 obs.) gives $38''.82$ (uncorrected) and $18''.9$ (with S. C.).
	Arm. - - - - -			8.80 ₁			18.1 ₁	
	Ay. 45 - - - - -			8.79			16.5	
	Yarn. - - - - -			8.76			16.5	
	Q. - - - - -			8.80			16.7 ₂	
	Ad. - - - - -			8.79			17.0	
5001	Q. - - - - -	15	5	38.28 ₂	29	42	15.1 ₁	
	Yarn. - - - - -			38.42 ₂			16.6 ₂	
	Smyth - - - - -			38.57			15.3	
	Main - - - - -			38.42			16.5	
	Ad. - - - - -			38.44			15.9	
5031	Müdl. - - - - -	15	9	15.46	29	37	45.2	
	Arm. - - - - -			15.44			45.9	
	Ay. 60 - - - - -			15.61			45.7	
	Q. - - - - -			15.43 ₁			44.3 ₁	
	Kbg. - - - - -			15.50 ₂			46.9 ₂	
	Ay. 72 - - - - -			-			45.6	
	Ad. - - - - -			15.49			45.8	
5048	Hend. - - - - -	15	12	-	21	1	52.5	
	Arm. - - - - -			48.21			52.6 ₂	
	Yarn. - - - - -			48.16 ₂			51.1	
	Ay. 60 - - - - -			48.36			53.0	
	Ad. - - - - -			48.25			52.3	
5098	St. - - - - -	15	22	40.57	29	32	15.4	St. has received a weight 3.
	Arm. - - - - -			40.64			15.3 ₁	
	Kbg. - - - - -			40.35			16.4	
	Q. - - - - -			40.55 ₂			15.3	
	Ay. 73 - - - - -			40.58 ₁			-	
	Ad. - - - - -			40.54			15.6	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
5143	St. - - - - -	15	29	23.74	27	8	11.9	
	R. C. ₃ - - - - -			23.75			10.9	
	Ay. 64 - - - - -			23.73			11.4	
	Gyld. - - - - -						11.7	
	Main 65 - - - - -			23.74			11.4	
	Ay. 70 - - - - -			23.76			11.6	
	Leid. - - - - -			23.73			12.0	
	Wn. 70 - - - - -						12.1	
	Ad. - - - - -			23.74			11.9	
5187	Mädl. - - - - -	15	35	58.60	20	4	29.4	
	Arm. - - - - -			58.58 ₂			29.3 ₂	
	Ay. 60 - - - - -			58.70			27.5	
	Kbg. - - - - -			58.50 ₂			29.6 ₂	
	Q. - - - - -			58.59			25.6 ₂	
	Wn. 72 - - - - -			58.71 ₂			27.0 ₂	
	Ad. - - - - -			58.62			27.8	
5192	St. - - - - -	15	37	29.67	26	41	33.6	
	Arm. - - - - -			29.56			34.9	
	Main - - - - -			29.61			34.4	
	Wn. 67 - - - - -			29.65			33.5	
	Ay. 72 - - - - -			29.71 ₁			33.5 ₁	
	Ad. - - - - -			29.64			33.9	
5236	Arm. - - - - -	15	43		28	32	28.8	P. M. in decl. used = -0".02, from Piazzi.
	Yarn. - - - - -			25.36 ₂			26.8	
	Bonn. - - - - -			25.44			29.1	
	Q. - - - - -			25.39 ₂			27.9	
	Ad. - - - - -			25.40			28.2	
5244	Mädl. - - - - -	15	44	21.09	26	27	9.7	Weights (in decl.) for Ay. 64 and Ay. 70, 1½ each.
	Ay. 60 - - - - -			21.14			7.8	
	Ay. 64 - - - - -			21.08			7.9	
	Q. - - - - -			21.05			7.3 ₂	
	Yarn. - - - - -			21.13 ₁			9.2 ₂	
	Ay. 70 - - - - -			21.11			8.1	
	Ad. - - - - -			21.10			8.0	
5252	Mädl. - - - - -	15	45	46.57	21	21	19.4	
	Arm. - - - - -			46.65			19.0	
	Yarn. - - - - -			46.54 ₂			17.4	
	Ay. 60 - - - - -			46.61			17.7	
	Kbg. - - - - -			46.58 ₁			20.6 ₁	
	Ay. 64 - - - - -			46.56				
	Ad. - - - - -			46.59			18.4	
5273	Hend. - - - - -	15	49		20	40	45.2	P. M. used -0".007, +0".05, from Lal. and Piazzi.
	Ay. 40 - - - - -			3.92				
	Ay. 45 - - - - -						44.4	
	Arm. - - - - -			3.89			44.8	
	Yarn. - - - - -			4.00 ₂			42.0	
	Kbg. - - - - -			4.23 ₁			45.4 ₁	
	Q. - - - - -			4.00 ₂			42.2 ₁	
	Ad. - - - - -			3.98			44.0	
5302	St. - - - - -	15	52	24.83	27	14	27.8	Weight of Ay. 70, 1½.
	Yarn. - - - - -			24.85			27.5 ₂	
	Wn. 72 - - - - -			24.75 ₂			29.8 ₂	
	Ay. 70 - - - - -			24.78			28.2	
	Ay. 73 - - - - -						28.1	
	Ad. - - - - -			24.81			28.1	
5322	Mädl. <i>corrected</i> - - - - -	15	56	54.90	23	9	8.2	A Königsberg observation, which gives 12".3, is excluded. Other observations, Paris 1864, 10".4; Ay. 1874, 9".9; Wn. 1874, 9".4, were finally included.
	Ay. 60 - - - - -			54.84			9.8	
	Q. - - - - -			54.95 ₂			7.7 ₂	
	Ad. - - - - -			54.89			10.0	
5399	Mädl. <i>corrected</i> - - - - -	16	6	18.86	23	49	9.5	Mädler is included. Final result, with -0".02 P. M. and including Pulcova, 9".1; gives for 1875.0 23° 49' 9".1.
	Kbg. - - - - -			18.92			7.5	
	Q. - - - - -			18.85 ₂			8.5 ₂	
	Arm. - - - - -			18.79			8.9 ₁	
	Ad. - - - - -			18.86			8.6	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
5434	Mädl. - - - - -	16	10	56.87	23	26	7.0	
	Q. - - - - -			56.84 ₂			5.1 ₁	
	Kbg. - - - - -			56.82 ₁			7.0 ₁	
	Main - - - - -			57.08			5.7	
	Wn. 72 - - - - -			56.91			5.0	
	Ad. - - - - -			56.91			5.6	
5440	Mädl. - - - - -	16	11	44.54	29	27	38.8	
	Arm. - - - - -			44.43			40.5 ₁	
	Kbg. - - - - -			44.28			38.2	
	Ay. 64 - - - - -			44.39			38.0	
	Main - - - - -			44.46			38.7	
	Ad. - - - - -			44.42			38.6	
5444	Mädl. - - - - -	16	12	33.09	23	54	49.0	
	Arm. - - - - -			33.24 ₁			49.4	
	Q. - - - - -			33.23 ₁			47.4 ₁	
	Ay. 64 - - - - -			33.15			49.3	
	Main - - - - -			33.11			47.5 ₂	
	Ad. - - - - -			33.15			48.6	
5448	Mädl. - - - - -	16	13	12.88	26	12	9.1	
	Arm. - - - - -						8.9	
	Kbg. - - - - -			13.00 ₁			9.5 ₁	
	Ay. 64 - - - - -			12.90			7.7	
	Main - - - - -			12.88			9.4	
	Ad. - - - - -			12.90			8.8	
5452	Q. - - - - -	16	14	38.98	21	26	10.4 ₂	Smyth (17 obs. in decl.) has wt. = 1½. A P. M. of — 0".06 is possible, and would give 8".6 for 1875.0.
	Ay. 64 - - - - -			38.98			9.1	
	Smyth - - - - -			39.09			8.7	
	Main - - - - -			39.04			9.3	
	Ad. - - - - -			39.02			9.2	
5525	St. - - - - -	16	24	50.82	21	45	48.7	Ay. 70 has a weight 1½.
	R. C. ₂ - - - - -			50.83			48.8	
	Kbg. - - - - -			50.80 ₂			48.2 ₂	
	Q. - - - - -			50.82 ₂			51.0	
	Yarn. - - - - -			50.81 ₂			47.5	
	Main - - - - -			50.88 ₂			47.5 ₂	
	Ay. 70 - - - - -			50.78			47.7	
	Leid. - - - - -						47.9	
	Ad. - - - - -			50.82			48.2	
5527	Yarn. - - - - -	16	25	7.92	20	45	14.5	Declination uncertain. Lalande gives 20° 45' 34".9; D'Agelet 19".6. Hence an error of 15" in L. L. and proper motion probable.
	R. C. ₂ - - - - -			7.98			14.7 ₁	
	Bonn. - - - - -			8.06 ₂			16.1 ₂	
	Q. - - - - -			7.92 ₂			13.8 ₂	
	Smyth - - - - -			8.16			16.0	
	Ad. - - - - -			8.01			15.1	
5530	Ay. 64 - - - - -	16	25	52.56	22	27	56.4	Two observations of Lalande give 57".0; no P. M.
	Q. - - - - -			52.50 ₂			56.1 ₁	
	Main - - - - -			52.60 ₂			58.1	
	Ad. - - - - -			52.55			56.8	
5597	Yarn. - - - - -	16	35	49.57	25	6	2.9	The P. M. indicated by Lal. is — 0".06; not confirmed.
	Smyth - - - - -			49.82			4.9	
	Q. - - - - -			49.61 ₂			5.0 ₁	
	Main - - - - -			49.79 ₂			4.8	
	Ad. - - - - -			49.70			4.4	
5602	Mädl. - - - - -	16	36	[31.85]	27	9	32.7	Mädler's P. M. in A. R. (0".092) is manifestly incorrect, and has been omitted.
	Arm. - - - - -						33.3 ₂	
	Ay. 60 - - - - -			32.59 ₂			32.8	
	Kbg. - - - - -			32.44 ₁			33.5 ₁	
	Wb. 67 - - - - -			32.51			32.8	
	Yarn. - - - - -			32.51			30.7 ₂	
	Main - - - - -			32.51 ₂			33.5	
	Ad. - - - - -			32.52			32.8	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
5624	Mädl. - - - - -	16	40	6.59	28	35	15.0	As Bradley has no decl., Mädler's P. M., which is confirmed by Piazzini, is retained.
	Arm. - - - - -						16.0	
	Kbg. - - - - -			6.93 ₁			17.6 ₁	
	Ay. 64 - - - - -			6.66			15.0	
	Main - - - - -			6.75			16.3	
	Ad. - - - - -			6.71			16.0	
5677	Mädl. - - - - -	16	46	34.34	24	52	6.4	Weight of Ay. 64 in decl., 1½.
	Kbg. - - - - -			34.29			3.9	
	Yarn. - - - - -			34.34			4.1	
	Main - - - - -			34.34			4.4	
	Ay. 64 - - - - -			34.33			4.8	
	Ad. - - - - -			34.33			4.4	
5703	Mädl. - - - - -	16	49	55.14	25	56	0.1	
	Arm. - - - - -			55.23			0.2	
	Ay. 64 - - - - -			55.20			0.5	
	Main - - - - -			55.25			0.9	
	Wn. 72 - - - - -			55.30			0.1	
	Ad. - - - - -			55.22			0.4	
5714	Mädl. - - - - -	16	52	23.23	25	32	50.8	
	Arm. - - - - -			23.16			50.4	
	Ay. 64 - - - - -			23.18			49.5	
	Q. - - - - -			23.16 ₂			49.8	
	Wn. 67 - - - - -			23.18			49.9	
	Main - - - - -			23.26			51.0	
	Ay. 70 - - - - -			23.11 ₁			50.1	
	Ad. - - - - -			23.19			50.1	
5786	Mädl. - - - - -	17	3	23.51	24	39	4.3	
	Ay. 64 - - - - -			23.53			3.0	
	Q. - - - - -						1.4 ₂	
	Main 70 - - - - -			23.60 ₂			4.4 ₂	
	Ad. - - - - -			23.54			2.9	
5798	Mädl. - - - - -	17	5	[53.06]	24	23	33.0	A. R. doubtful on account of Piazzini. I have used Mädler's P. M.
	Arm. - - - - -			52.86 ₁			31.8	
	R. C. ₂ - - - - -			52.76			29.3	
	Q. - - - - -			52.84			30.6	
	Wn. 67 - - - - -			52.71			30.8	
	Ad. - - - - -			52.78			30.5	
5828	St. - - - - -	17	9	53.84	24	59	16.6	
	Yarn. - - - - -			53.79 ₂			15.3	
	R. C. ₂ - - - - -			53.77			16.0 ₂	
	Q. - - - - -			53.78 ₂			16.6 ₂	
	Wn. 67 - - - - -			53.95			17.2	
	Main - - - - -			53.85			16.7	
	Wn. 72 - - - - -			53.86 ₂			16.7 ₂	
	Ay. 72 - - - - -			53.83 ₂			17.5	
	Ad. - - - - -			53.84			16.6	
5860	Mädl. - - - - -	17	15	45.35	24	37	31.8	
	Arm. - - - - -			45.29			28.8 ₂	
	Yarn. - - - - -			45.29			29.4	
	Q. - - - - -			45.22 ₁			30.4 ₂	
	Ay. 64 - - - - -			45.24			31.2	
	Ay. 70 - - - - -			45.29			30.7	
	Ad. - - - - -			45.29			30.3	
5883	Mädl. <i>corrected</i> - - - - -	17	18	52.88	23	4	40.7	
	Yarn. - - - - -			52.78			39.3	
	Q. - - - - -			52.77			40.4 ₂	
	R. C. ₂ - - - - -			52.79			39.5	
	Ad. - - - - -			52.80			40.0	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
5900	Ay. 40 - - - - -	17	21	25.31	20	11	-	Weight of Ay. 73, 1½ in decl.
	Ay. 45 - - - - -						19.6	
	Arm. - - - - -			25.31			20.0 ₁	
	Yarn. - - - - -			25.39			18.7	
	Q. - - - - -			25.35			19.8	
	Kbg. - - - - -			25.39 ₁			21.3 ₁	
	Ay. 64 - - - - -			25.43 ₂			20.0	
	Ay. 73 - - - - -			25.45			20.4	
	Ad. - - - - -			25.37			19.9	
5922	Mädl. - - - - -	17	25	41.13	26	12	24.6	Weights of Main and Ay. 72 in decl., 1½ each.
	Arm. - - - - -			41.17			24.1	
	Ay. 60 - - - - -			41.15			22.3	
	Kbg. - - - - -			41.11			24.7	
	Q. - - - - -			41.05			23.5 ₂	
	Yarn. - - - - -			41.23			23.1 ₂	
	Main - - - - -			41.30			22.8	
	Ay. 72 - - - - -			41.18			22.4	
	Ad. - - - - -			41.17			23.0	
5931	Mädl. - - - - -	17	26	55.07	28	29	59.4	
	Bonn. - - - - -			55.08 ₂			57.9 ₂	
	Ay. 64 - - - - -			55.05			57.6	
	Kbg. - - - - -			54.93 ₁			59.8 ₁	
	Q. - - - - -			55.09 ₂			56.2 ₁	
	Main - - - - -			55.09			56.9	
	Ay. 72 - - - - -			55.08			58.4	
	Ad. - - - - -			55.07			57.7	
5967	Mädl. <i>corrected</i> - - - - -	17	32	22.18	24	23	8.0	Declination confirmed by later data: Pulc., 9".2; Wn. 75, 8".2.
	Arm. - - - - -			22.17			9.4	
	Ad. - - - - -			22.17			8.5	
5988	Mädl. - - - - -	17	35	57.34	24	34	35.2	
	Arm. - - - - -			57.48			36.1 ₂	
	R. C. ₂ - - - - -			57.43			34.6	
	Q. - - - - -			57.43 ₂			34.3	
	Kbg. - - - - -			57.39 ₁			32.8 ₁	
	Main - - - - -			57.48			35.5	
	Ay. 72 - - - - -			57.48 ₂			35.1 ₂	
	Ad. - - - - -			57.44			34.9	
5994	T. - - - - -	17	36	35.21	24	38	16.6	Piazzi gives in decl. 13".4; Lalande gives 16".0.
	Arm. - - - - -			35.37 ₁			14.0 ₁	
	R. C. ₂ - - - - -						13.6	
	Q. - - - - -			35.20 ₁			12.0	
	Ad. - - - - -			35.25			14.0	
5999	Mädl. - - - - -	17	37	20.81	24	37	41.4	I have used the P. M. in decl. from the Åbo. catalogue. See the note to C. A., 413.
	Arm. - - - - -			20.99			42.9	
	Q. - - - - -			20.81 ₂			42.0	
	Ay. 64 - - - - -			20.85			42.4	
	Main - - - - -			20.91			42.5	
	Ay. 72 - - - - -			20.90			42.7	
	Ad. - - - - -			20.88			42.5	
6005	Mädl. - - - - -	17	38	13.86	24	23	2.9	
	Arm. - - - - -			13.73			1.7	
	Yarn. - - - - -			13.73 ₂			0.0	
	R. C. ₂ - - - - -			13.79			0.4	
	Kbg. - - - - -			13.70 ₂			1.1 ₂	
	Ay. 64 - - - - -			13.80			0.7	
	Ay. 73 - - - - -						1.0 ₂	
	Ad. - - - - -			13.77			0.8	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
6021	St. - - - - -	17	41	34.01	27	47	42.6	
	Yarn. - - - - -			34.00			42.1	
	R. C. ₂ - - - - -			33.95			42.1	
	Ay. 64 - - - - -			34.03			42.3	
	Main 65 - - - - -			34.00			43.3	
	Arg. - - - - -			34.02			42.0	
	Eug. - - - - -			34.02			41.9	
	Leid. - - - - -			.			42.7	
	Ay. 70 - - - - -			34.00			42.4	
	Main 70 - - - - -			34.00			42.3	
	Ad. - - - - -			34.01			42.4	
6033	Mädl. - - - - -	17	43	45.12	25	39	57.6	
	Arm. - - - - -			44.95			58.1	
	Yarn. - - - - -			45.04 ₂			56.0	
	R. C. ₂ - - - - -			44.97			57.7	
	Ay. 60 - - - - -			45.10			57.2	
	Q. - - - - -			45.06			56.8 ₂	
	Kbg. - - - - -			45.10			58.0 ₂	
	Ay. 72 - - - - -			.			57.2	
	Ay. 73 - - - - -			45.04			57.2	
	Ad. - - - - -			45.05			57.2	
6073	Mädl. - - - - -	17	50	22.78	26	4	16.6	The star is a fundamental one at Greenwich and Oxford, and Ay. and Main receive weight = 1 $\frac{1}{2}$.
	Arm. - - - - -			22.72			17.5 ₂	
	Yarn. - - - - -			22.62			16.3	
	Ay. 60 - - - - -			22.68			16.6	
	Q. - - - - -			22.60			16.5	
	Ay. 64 - - - - -			22.64			16.6	
	Main 65 - - - - -			22.62			16.8	
	Main 70 - - - - -			22.70			17.2	
	Ay. 70 - - - - -			22.63			17.2	
	Wn. 72 - - - - -			22.72 ₂			16.9 ₂	
	Ad. - - - - -			22.67			16.8	
6084	St. - - - - -	17	52	54.38	29	15	44.6	I have given Pulc. a weight = 1 in declination; it seems not to have been used in St.
	Pulc. - - - - -			54.41			45.8 ₂	
	Arm. - - - - -			.			46.0 ₂	
	Ay. 50 - - - - -			.			44.9	
	Kbg. - - - - -			.			45.1	
	Ay. 60 - - - - -			.			44.3	
	Q. - - - - -			54.41			45.7	
	Ay. 72 - - - - -			54.41 ₂			45.6 ₂	
	Ad. - - - - -			54.40			45.3	
6106	Mädl. - - - - -	17	56	[11.85]	21	35	52.0	The position of the middle point between the two stars is here given.
	Q. - - - - -			11.94			51.6 ₁	
	Main - - - - -			11.99			51.7	
	Yarn. - - - - -			11.98			50.7	
	Ay. 64 - - - - -			12.03 ₂			51.6 ₂	
	Wn. 67 - - - - -			12.06			52.7	
	Ad. - - - - -			12.00			51.7	
6110	Mädl. - - - - -	17	57	2.47	20	50	5.6	
	Arm. - - - - -			2.45			7.0 ₂	
	Ay. 60 - - - - -			2.46			5.2	
	Kbg. - - - - -			2.76 ₂			5.6 ₂	
	Ay. 64, 72 - - - - -			2.47 ₂			5.8	
	Main - - - - -			2.42 ₁			4.5 ₂	
	Ad. - - - - -			2.50			5.6	
6116	Mädl. - - - - -	17	57	16.56	22	55	26.5	
	Arm. - - - - -			16.50			26.8	
	Main - - - - -			16.61			25.5	
	Ay. 64, 70 - - - - -			16.66			25.8	
	Ad. - - - - -			16.64			26.0	
6134	Mädl. - - - - -	18	0	46.19	22	12	32.2	
	Arm. - - - - -			46.00			32.6 ₁	
	Ay. 64 - - - - -			.			.	
	Main - - - - -			46.01			32.7	
	Ay. 72 - - - - -			46.06			32.6	
	Ad. - - - - -			46.06			32.6	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
6150	St. - - - - -	18	2	39.99	28	44	47.6	
	Kbg. - - - - -			39.97			47.4	
	Wn. 72 - - - - -			40.08			48.1	
	Main - - - - -			39.85 ₁			47.4	
	Ay. 70 - - - - -			-			47.5 ₂	
	Ad. - - - - -			39.99			47.6	
6151	Mädl. - - - - -	18	2	47.24	26	4	48.7	
	Arm. - - - - -			47.32			49.3 ₂	
	R. C. ₂ - - - - -			47.17			47.9	
	Yarn. - - - - -			47.20 ₂			49.1 ₂	
	Q. - - - - -			47.08 ₂			47.0 ₂	
	Kbg. - - - - -			47.04 ₂			46.9 ₂	
	Ay. 64 - - - - -			47.10			48.6	
	Main - - - - -			47.17 ₂			49.3 ₁	
	Ad. - - - - -			47.17			48.2	
6152	Mädl. - - - - -	18	2	47.17	26	5	3.5	
	Arm. - - - - -			47.23			4.2 ₂	
	R. C. ₂ - - - - -			47.21			2.1	
	Yarn. - - - - -			47.12 ₂			4.1 ₂	
	Q. - - - - -			47.12 ₂			1.4 ₂	
	Ay. 64 - - - - -			47.18 ₁			2.6 ₁	
	Ad. - - - - -			47.17			2.8	
6157	Mädl. - - - - -	18	3	[24.46]	20	47	45.7	
	Arm. - - - - -			[24.46]			46.9 ₂	
	Kbg. - - - - -			24.70			47.8	
	Q. - - - - -			24.60 ₂			45.8 ₁	
	Ay. 64 - - - - -			24.73			46.1	
	Main - - - - -			24.69			47.2	
	Ad. - - - - -			24.68			46.9	
6159	Mädl. - - - - -	18	3	[29.01]	20	1	38.5	There is much confusion in Mädler's data for A. R.
	Arm. - - - - -			29.46			38.9	
	Kbg. - - - - -			29.60 ₁			37.8 ₁	
	Ay. 64 - - - - -			29.51			37.7	
	Main - - - - -			29.48 ₂			39.7	
	Ay. 72 - - - - -			29.46 ₂			37.2 ₂	
	Ad. - - - - -			29.49			38.4	
6223	Mädl. - - - - -	18	14	2.14	24	23	44.4	
	Ay. 50 - - - - -			2.16 ₂			45.0	
	Arm. - - - - -			2.10			42.9	
	Ay. 60-64 - - - - -			2.08			43.4	
	Wn. 72 - - - - -			2.09			44.3	
	Ad. - - - - -			2.11			43.9	
6231	Mädl. - - - - -	18	15	0.61	21	54	37.2	
	Arm. - - - - -			0.66			37.0 ₁	
	Q. - - - - -			0.58 ₂			34.6 ₂	
	Kbg. - - - - -			0.76 ₁			35.8 ₁	
	Ay. 64 - - - - -			0.64			34.7	
	Main - - - - -			0.61 ₂			37.0 ₂	
	Ad. - - - - -			0.64			35.7	
6232	Mädl. - - - - -	18	15	2.77	29	36	47.2	
	Arm. - - - - -			2.90			48.4 ₁	
	Q. - - - - -			2.74 ₂			47.8 ₂	
	Main - - - - -			2.73 ₂			48.5	
	Ad. - - - - -			2.80			48.3	
6234	Mädl. - - - - -	18	15	33.40	28	55	47.6	
	Arm. - - - - -			33.30			46.6 ₁	
	Ay. 64 - - - - -			33.26			45.6	
	Main - - - - -			33.34			45.3	
	Ad. - - - - -			33.32			45.7	
6237	Mädl. - - - - -	18	16	8.17	29	48	2.5	
	Arm. - - - - -			8.31			4.6 ₂	
	R. C. ₂ - - - - -			8.14			1.4	
	Q. - - - - -			8.21			1.5	
	Kbg. - - - - -			8.24 ₁			4.8 ₁	
	Ay. 64 - - - - -			8.24			2.5	
	Ad. - - - - -			8.22			2.6	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
6238	Mädl. <i>corrected</i> - - - - -	18	16	8.56	28	48	42.2	
	Kbg. - - - - -			8.60 ₁			44.4 ₁	
	Ay. 64 - - - - -			8.42			42.9	
	Main - - - - -			8.46 ₂			43.0 ₂	
	Ad. - - - - -			8.50			42.9	
6241	Mädl. - - - - -	18	16	55.80	23	13	23.0	Mädler's data in A. R. are of dates between 1835 and 1845 only; the final A. R. includes a later Greenwich observation (55°.97) made in 1874.
	Arm. - - - - -			55.77			21.8 ₁	
	Yarn. - - - - -			55.89 ₂			22.7	
	Q. - - - - -						22.7 ₂	
	Wn. 67 - - - - -			55.93			24.1	
	Ay. 72 - - - - -			55.83 ₁			23.5	
	Ad. - - - - -			55.91			23.1	
6251	St. - - - - -	18	18	22.27	21	42	51.6	
	Arm. - - - - -			22.10			53.2	
	R. C. ₂ - - - - -			22.19			51.6	
	Ay. 68 - - - - -			22.30 ₁			50.6 ₁	
	Ad. - - - - -			22.23			51.8	
6300	Hend. - - - - -	18	24	24.83	23	47	5.6	Ay. 72 (13 obs. in decl.) has wt. = 1½. Piazz, without P. M., gives 3''.4; Lande, without P. M., gives 5''.5.
	Arm. - - - - -			24.73			5.1 ₂	
	Q. - - - - -			24.77			3.4 ₂	
	Ay. 64 - - - - -			24.79			3.9	
	Main - - - - -			24.85			5.0 ₂	
	Ay. 72 - - - - -			24.78			3.6	
	Ay. 73 - - - - -						3.6	
	Ad. - - - - -			24.79			4.2	
6322	Ay. 40 - - - - -	18	27		23	31	29.7 ₂	Ay. 72 (22 obs. in decl.) has double weight; the P. M. used is +0''.02, which gives c.—o. Pi. +0''.4, Lal.—1''.6.
	Hend. - - - - -			34.17			32.1	
	Ay. 45 - - - - -			34.04				
	Arm. - - - - -			33.94			31.4	
	Yarn. - - - - -			33.80			29.8	
	Q. - - - - -			34.08			29.7 ₂	
	Ay. 64 - - - - -			34.07 ₂			30.5	
	Wn. 72 - - - - -			34.12 ₂			30.1 ₂	
	Ay. 72 - - - - -			34.08			30.0	
	Ay. 73 - - - - -			34.10 ₁			29.8	
	Ad. - - - - -			34.04			30.4	
6341	Hend. - - - - -	18	30	18.01	23	30	21.6	Ay. 72 (11 obs. in decl.) has weight = 1½.
	Ay. 40 - - - - -			18.03			20.5	
	Arm. - - - - -			18.31			20.3	
	Yarn. - - - - -			18.11 ₂			20.2 ₂	
	Q. - - - - -			18.16			19.2 ₂	
	Ay. 72 - - - - -			18.28			21.4	
	Ay. 73 - - - - -			18.23 ₁			21.5	
	Ad. - - - - -			18.14			20.8	
6387	St. - - - - -	18	40	17.02	20	25	41.0	St. includes Ay. 64 besides the Pulcova observations about 1845.
	Kbg. - - - - -			16.98			41.0	
	R. C. ₂ - - - - -			16.96			40.3	
	Q. - - - - -			16.92			40.8	
	Wn. 67 - - - - -			16.90			41.6	
	Wn. 72 - - - - -			16.95			40.5	
	Ad. - - - - -			16.97			40.9	
6438	Mädl. - - - - -	18	46	56.08	21	16	33.3	
	Arm. - - - - -			55.97			32.4	
	Q. - - - - -			55.96 ₂			33.0 ₁	
	Kbg. - - - - -			55.92 ₂			33.5 ₂	
	Ay. 64 - - - - -			56.09			33.5	
	Main - - - - -			56.13			35.2	
	Ad. - - - - -			56.04			33.6	
6453	Mädl. - - - - -	18	49	28.30	22	29	18.7	
	Arm. - - - - -			28.22			18.2	
	Yarn. - - - - -			28.23 ₂			16.0	
	Ay. 60 - - - - -			28.27			17.0	
	Ay. 64 - - - - -			28.25 ₂			17.4 ₂	
	Wn. 72 - - - - -			28.29 ₂			17.4 ₂	
	Ay. 71 - - - - -			28.27			17.2	
	Ay. 73 - - - - -						17.8	
	Ad. - - - - -			28.26			17.3	

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h.</i> <i>m.</i> <i>s.</i>	<i>°</i> <i>'</i> <i>"</i>	
6542	Mädl. - - - - -	19 0 51.74	24 3 24.0	Mädler's A. R. is taken directly from B. A. C., which is in some way wrongly reduced to 1850. The note in B. A. C. does not explain the error. I have assumed P. M. = 0; 1 obs. of Br. (Anwers) gives +0".02; 2 obs. of Lal. give -0".04.
	Arm. - - - - -	1 25.60	31.0	
	R. C. ₂ - - - - -	25.56	29.1	
	Ay. 60 - - - - -	25.68	30.1	
	Kbg. - - - - -	25.79 ₂	30.9 ₂	
	Smyth - - - - -	25.69 ₂	29.1 ₃	
	Q. - - - - -	25.54 ₁	28.2 ₁	
6547	Ad. - - - - -	25.64	29.9	For the A. R. a P. M. of +0".008 is probable; this would give 40".13. Lalande's declinations are discordant and seemingly erroneous.
	Hend. - - - - -	19 1 39.87	28 25 57.6	
	Arm. - - - - -	40.00	59.2	
	Q. - - - - -	39.95	58.3	
	R. C. ₂ - - - - -	39.92	58.0	
	Kbg. - - - - -	40.14 ₁	60.1 ₃	
	Ay. 64 - - - - -	40.03	59.6	
6574	Ad. - - - - -	39.97	58.8	Lalande gives 14".14 without S. C.; and 41".2 with S. C.
	Ay. 64 - - - - -	19 7 15.04	21 20 43.3	
	Main - - - - -	15.08	43.1	
	Smyth - - - - -	15.01 ₁	43.6	
	Yarn. - - - - -	14.95 ₂	43.2	
6582	Ad. - - - - -	15.03	43.3	Mädler's A. R. is taken directly from B. A. C., which is in some way wrongly reduced to 1850. The note in B. A. C. does not explain the error. I have assumed P. M. = 0; 1 obs. of Br. (Anwers) gives +0".02; 2 obs. of Lal. give -0".04.
	Mädl. - - - - -	19 9 54.24	21 0 54.2	
	Arm. - - - - -	54.20	54.3	
	Yarn. - - - - -	54.18 ₂	53.7	
	Q. - - - - -	-	53.3 ₂	
	Kbg. - - - - -	54.22 ₂	56.0 ₂	
	Ay. 64 - - - - -	54.12	53.9	
	Main - - - - -	54.33	55.8	
	Wn. 67 - - - - -	54.25 ₂	54.2 ₂	
6589	Ad. - - - - -	54.22	54.4	Smyth has weight 1½ in decl.
	Mädl. - - - - -	19 10 50.55	21 10 17.1	
	Arm. - - - - -	[50.41 ₁]	16.7 ₂	
	Yarn. - - - - -	50.56 ₂	15.6	
	Ay. 60 - - - - -	50.63	15.3	
	Kbg. - - - - -	50.66 ₂	14.8 ₂	
	Ay. 72 - - - - -	50.65	16.5	
	Ay. 73 - - - - -	50.65 ₂	16.0	
	Ad. - - - - -	50.61	15.8	
6602	Yarn. - - - - -	19 12 26.17	22 48 6.6 ₂	Ay. 72 (21 obs. in decl.) has weight = 1½.
	Q. - - - - -	26.26 ₂	5.9 ₁	
	Smyth - - - - -	26.34	5.6	
	Main - - - - -	26.26	6.4	
	Ad. - - - - -	26.26	6.0	
6637	Mädl. - - - - -	19 17 43.76	26 1 24.6	There is some error in Mädler's A. R. I assume P. M. = 0. Bradley has no decl.
	Arm. - - - - -	43.65	26.5	
	Kbg. - - - - -	43.67	26.0	
	Ay. 64 - - - - -	43.70	26.0	
	Main - - - - -	43.77	26.5	
	Ay. 72 - - - - -	43.68	25.8	
	Ay. 73 - - - - -	43.73 ₁	25.2	
	Ad. - - - - -	43.71	26.0	
6648	Mädl. - - - - -	19 19 11.90	29 22 41.9	There is some error in Mädler's A. R. I assume P. M. = 0. Bradley has no decl.
	Hend. - - - - -	-	41.4	
	Ay. 40-45 - - - - -	11.90	41.0	
	Arm. - - - - -	12.00	41.5	
	Yarn. - - - - -	11.74 ₂	40.6	
	Kbg. - - - - -	11.81 ₂	43.0 ₂	
	Ad. - - - - -	11.88	41.5	
6652	Mädl. - - - - -	19 19 [56.43]	20 1 37.5	There is some error in Mädler's A. R. I assume P. M. = 0. Bradley has no decl.
	Arm. - - - - -	55.68	35.2 ₂	
	Jac. - - - - -	55.58	36.3	
	R. C. ₂ - - - - -	55.39	36.0	
	Ay. 64 - - - - -	55.60	35.6	
	Ad. - - - - -	55.56	35.8	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
6657	Mädl. - - - - -	19	20	15.49	24	41	19.6	
	Arm. - - - - -			15.58			20.0	
	Q. - - - - -			15.39			17.6	
	Kbg. - - - - -			15.32			17.7	
	R. C. ₂ - - - - -			15.39			16.3	
	Ay. 64 - - - - -			15.42			18.3	
	Ay. 71-73 - - - - -			15.39			17.4	
	Ad. - - - - -			15.43			17.9	
6673	Mädl. - - - - -	19	23	16.99	29	11	9.0	There is probably a misprint in Mädler's declination; it should read 29° 8' 52".45, and 29° 11' 49".0 when reduced to 1875.
	Arm. - - - - -			17.09			48.6	
	Yarn. - - - - -			16.98 ₂			47.2	
	Kbg. - - - - -			16.98 ₂			46.5 ₂	
	Q. - - - - -			17.01 ₁			47.4 ₂	
	Ay. 64 - - - - -			17.07			47.6	
	Main - - - - -			17.06			49.0	
	Wn. 67 - - - - -			16.98			47.4	
6674	Ad. - - - - -			17.02			47.8	
	Mädl. - - - - -	19	23	30.22	24	24	48.6	Double weight to Ay. 60, 64, 70; Main 70.
	Arm. - - - - -			30.12			48.1	
	R. C. ₂ - - - - -			30.20			47.0	
	Ay. 60 - - - - -			30.25			47.0	
	Q. - - - - -			30.27 ₂			46.2	
	Ay. 64 - - - - -			30.24			47.2	
	Main 65 - - - - -			30.25			47.7	
	Main 70 - - - - -			30.26			48.1	
6676	Ay. 70 - - - - -			30.23			47.5	
	Ad. - - - - -			30.23			47.4	
	Mädl. - - - - -	19	23	44.02	24	30	44.7	
	Arm. - - - - -			44.12			44.3	
	Bonn. - - - - -			44.25 ₁			44.6 ₁	
	R. C. ₂ - - - - -			43.99			43.8	
	Q. - - - - -			44.06 ₂			42.4 ₁	
	Ay. 64 - - - - -			44.09			43.3	
	Ad. - - - - -			44.06			43.7	
6678	Mädl. - - - - -	19	23	53.73	20	1	28.1	
	Ay. 64 - - - - -			-			24.4	
	Q. - - - - -			-			25.4 ₁	
	Main - - - - -			53.76			24.3	
	Ad. - - - - -			53.72			24.6	
6690	St. - - - - -	19	25	40.84	27	41	54.4	Weights in A. R., 5, 1, 1½, 1, 1½, 1; in decl., 5, 1, 1, 1, 2, 1½, 1½.
	Kbg. - - - - -			40.83			55.3	
	Yarn. - - - - -			40.82			55.3	
	R. C. ₂ - - - - -			40.71			54.0	
	Leid. - - - - -			-			54.3	
	Ay. 70 - - - - -			40.83			54.1	
	Main - - - - -			40.75			54.3	
	Ad. - - - - -			40.81			54.4	
6691	Ad. - - - - -	19	25	43.02	27	42	13.7	By diff. of A. R. and decl. from preceding.
6695	Hend. - - - - -	19	26	36.36	20	39	55.5	Weight of Main, 1½. P. M. very small by Piazz, and assumed = 0.
	Arm. - - - - -			36.27			54.0	
	Q. - - - - -			36.17 ₁			52.2 ₁	
	Main - - - - -			36.30			54.0	
6714	Ad. - - - - -			36.29			54.2	Weight of Main, 1½. The P. M. has been assumed = 0. Piazz, agrees exactly in decl. with the adopted value. Br. has no decl.
	Mädl. - - - - -	19	29	[52.97]	29	11	21.6	
	Arm. - - - - -			52.72			22.2	
	Yarn. - - - - -			52.84 ₂			20.3	
	Q. - - - - -			52.82 ₂			20.9 ₂	
	Kbg. - - - - -			52.80 ₂			23.4 ₂	
	Ay. 64 - - - - -			52.89			20.3	
	Main - - - - -			52.99			21.4	
6714	Ad. - - - - -			52.84			21.4	

DETAILS OF POSITIONS—DIVISION II.

99

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
6740	Mädl. - - - - -	19 34 26.35	29 51 59.1	Weight in decl. of Ay. 50 and Ay. 72, 1½ each.
	Arm. - - - - -	26.29	58.7	
	Ay. 50 - - - - -	26.40	59.9	
	Yarn. - - - - -	26.30 ₂	58.8	
	Ay. 72 - - - - -	26.30	58.7	
	Ay. 73 - - - - -	- . .	59.2	
	Wn. 73 - - - - -	26.23	59.5	
	Ad. - - - - -	26.31	59.2	
6758	Mädl. - - - - -	19 38 31.12	25 28 26.3	
	Arm. - - - - -	31.18	26.5	
	Main - - - - -	31.03	26.4	
	Ay. 64 - - - - -	31.07	26.7	
	Ay. 72 - - - - -	31.11	26.6	
	Ay. 73 - - - - -	- . .	26.6	
	Ad. - - - - -	31.10	26.6	
6762	Mädl. - - - - -	19 38 48.47	26 50 15.8	
	Arm. - - - - -	48.56	15.7	
	Smyth - - - - -	48.67	15.5	
	Kbg. - - - - -	48.72 ₁	16.9 ₁	
	Ay. 64 - - - - -	48.70	14.7	
	Wn. 67 - - - - -	48.69	15.3	
	Main - - - - -	48.63	15.8	
	Ad. - - - - -	48.63	15.5	
6810	Mädl. - - - - -	19 45 [40.71]	22 17 37.4	Mädler's P. M. seems erroneous in A. R.
	Arm. - - - - -	[40.93]	37.2	
	Main - - - - -	41.00	37.0	
	Ay. 64 - - - - -	41.12	37.0	
	Ay. 72 - - - - -	41.16 ₁	36.8	
	Ad. - - - - -	41.08	37.0	
6827	Mädl. - - - - -	19 48 8.95	23 45 18.3	
	Arm. - - - - -	8.72	16.3	
	Ay. 60 - - - - -	8.89	17.0 ₂	
	Wn. 67 - - - - -	8.87	17.9	
	Ay. 73 - - - - -	8.89 ₁	16.9	
	Ad. - - - - -	8.86	17.0	
6835	Mädl. - - - - -	19 49 12.87	23 59 34.1	
	Arm. - - - - -	12.84 ₂	35.3	
	Q. - - - - -	12.77 ₂	33.6 ₂	
	Ay. 64 - - - - -	12.88	34.4	
	Main - - - - -	12.88	35.0	
	Ad. - - - - -	12.85	34.6	
6866	Mädl. - - - - -	19 53 48.76	22 45 43.5	
	Arm. - - - - -	48.70	- . .	
	Hend. - - - - -	- . .	45.8	
	Ay. 60 - - - - -	48.71 ₂	44.4	
	Q. - - - - -	48.64	43.6 ₁	
	Ay. 72 - - - - -	48.85 ₁	44.8	
	Ad. - - - - -	48.72	44.8	
6879	Mädl. - - - - -	19 55 57.13	27 24 35.2	
	Arm. - - - - -	57.08	33.7	
	Ay. 60 - - - - -	57.16	33.8	
	Q. - - - - -	57.05 ₁	32.9 ₁	
	Kbg. - - - - -	57.07 ₂	32.9 ₂	
	Yarn. - - - - -	57.08 ₁	36.1 ₂	
	Ay. 72 - - - - -	57.21 ₁	32.7	
	Ad. - - - - -	57.11	33.7	
6882	Mädl. - - - - -	19 56 26.90	24 27 18.4	
	Arm. - - - - -	26.88	18.4	
	Yarn. - - - - -	26.95	16.4	
	Ay. 60 - - - - -	26.94	17.1	
	Q. - - - - -	26.84	16.7 ₂	
	Ad. - - - - -	26.90	17.2	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
6883	Müdl. - - - - -	19	56	43.23	24	35	22.7	
	Arm. - - - - -			43.13			[24.4]	
	Yarn. - - - - -			43.27			20.3	
	Q. - - - - -			43.11 ₃			20.3	
	Kbg. - - - - -			43.32 ₂			21.8 ₃	
	Ay. 64 - - - - -			43.28			21.0	
	Main - - - - -			43.31			20.0	
	Ad. - - - - -			43.24			20.6	
6912	Müdl. - - - - -	20	1	31.03	23	15	19.3	Weight of Ay. 64: in A. R., 1 $\frac{1}{2}$; in decl. 2; of Ay. 70 in decl., 1 $\frac{1}{2}$.
	Arm. - - - - -			31.09			19.6	
	Yarn. - - - - -			31.04 ₂			18.6	
	Ay. 64 - - - - -			31.13			19.2	
	Ay. 70 - - - - -			31.16 ₂			19.3	
	Ad. - - - - -			31.09			19.2	
6927	Müdl. - - - - -	20	3	16.49	21	47	[36.6]	The P. M. in decl. — 0".15 is derived from comparison with Bessel, 1815, corrected by + 1".56.
	Arm. - - - - -			16.67			28.8	
	Ay. 64 - - - - -			16.56			28.3	
	Main - - - - -			16.52			30.6	
	Ad. - - - - -			16.56			29.3	
6933	Müdl. - - - - -	20	4	25.74	20	32	42.3	
	Arm. - - - - -			25.74			42.8	
	Kbg. - - - - -			25.72 ₂			41.1 ₂	
	Main - - - - -			25.60			41.4	
	Ay. 64 - - - - -			25.64			41.6 ₂	
	Wn. 72 - - - - -			25.65			41.1	
	Ad. - - - - -			25.68			41.6	
6940	Müdl. - - - - -	20	5	20.29	26	32	7.6	
	Hend. - - - - -			.			5.6	
	Arm. - - - - -			20.31			6.7	
	Q. - - - - -			20.42 ₁			3.8 ₂	
	Ay. 60 - - - - -			.			5.2 ₂	
	Ay. 64 - - - - -			20.46			4.6	
	Yarn. - - - - -			20.44 ₂			5.3 ₂	
	Ad. - - - - -			20.38			5.1	
6941	Müdl. - - - - -	20	5	33.30	20	45	57.1	
	Arm. - - - - -			33.44			49.7	
	Yarn. - - - - -			33.32 ₂			49.7	
	R. C. - - - - -			33.43 ₂			48.7	
	Ay. 64 - - - - -			33.39			48.9	
	Smyth - - - - -			33.40			49.5	
	Q. - - - - -			33.30 ₂			49.4 ₂	
	Ad. - - - - -			33.37			49.3	
6943	Müdl. - - - - -	20	6	34.61	26	26	13.9	
	Arm. - - - - -			34.52			13.3	
	Q. - - - - -			34.53 ₁			11.7 ₁	
	Ay. 72 - - - - -			34.53 ₂			13.2 ₂	
	Yarn. - - - - -			34.41 ₂			15.6 ₂	
	Wn. 73 - - - - -			34.58			13.7	
	Ad. - - - - -			34.54			13.6	
6944	Müdl. - - - - -	20	6	46.26	26	6	24.6	
	Arm. - - - - -			46.25			25.5	
	Bonn. - - - - -			46.31 ₁			24.0 ₁	
	Kbg. - - - - -			46.22 ₂			24.5 ₂	
	Ay. 64 - - - - -			46.19			23.6	
	Main - - - - -			46.24			25.0	
	Ay. 68 - - - - -			46.17 ₂			24.6 ₂	
	Ad. - - - - -			46.23			24.6	
6957	Müdl. - - - - -	20	9	6.48	28	19	2.2	
	Arm. - - - - -			[5.83 ₂]			2.4	
	Q. - - - - -			6.32 ₂			0.9 ₁	
	Ay. 64 - - - - -			6.37			1.6	
	Main - - - - -			6.53 ₁			3.3	
	Ay. 72 - - - - -			6.39 ₁			2.1	
	Ad. - - - - -			6.41			2.2	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
6966	Ay. 60 - - - - -	20	9	58.01 ₂	25	12	41.4	I have assumed no P. M. Lalande gives 58°.20 and 43'".2; the latter with systematic correction.
	Bonn. - - - - -			58.10			42.0	
	Smyth - - - - -			58.09			40.3	
	Kbg. - - - - -			58.01 ₁			43.5 ₁	
	Q. - - - - -			58.04 ₂			41.3 ₁	
	Ad. - - - - -			58.06			41.5	
6968	Müdl. - - - - -	20	10	6.25	23	7	41.3	
	Hend. - - - - -			6.25			41.1	
	Ay. 64 - - - - -			6.26			40.2	
	Main - - - - -			6.28			41.1	
	Ad. - - - - -			6.26			40.8	
6973	Müdl. - - - - -	20	10	35.40	27	25	55.6	
	Arm. - - - - -			35.16			55.6	
	Yarn. - - - - -			35.25 ₂			54.1	
	Ay. 60 - - - - -			35.36 ₂			54.4	
	Ay. 64 - - - - -			35.34			55.2	
	Ay. 73 - - - - -			.			54.9	
	Ad. - - - - -			35.33			54.8	
6975	Müdl. - - - - -	20	10	[50.40]	21	12	58.1	
	Hend. - - - - -			50.25			59.7	
	Arm. - - - - -			50.20 ₁	13	0.3 ₁		
	Ay. 64 - - - - -			50.20	12	59.6		
	Main - - - - -			50.31 ₂	13	0.5		
	Ad. - - - - -			50.24	12	59.9		
6978	Müdl. - - - - -	20	11	15.75	27	23	32.8	Br. has no decl.; the P. M. from Pi. is less than + 0'".01, and has been omitted.
	Arm. - - - - -			.			32.1	
	Yarn. - - - - -			15.56 ₂			33.3	
	Q. - - - - -			.			31.4	
	Ay. 64 - - - - -			15.82 ₂			32.1 ₂	
	Main. - - - - -			15.72			31.9	
	Ad. - - - - -			15.72			32.2	
6979	St. - - - - -	20	11	26.19	24	17	14.6	
	Pnle. - - - - -			26.14			13.8	
	Ad. - - - - -			26.17			14.2	
7013	Müdl. - - - - -	20	16	41.02	24	2	57.3	
	Arm. - - - - -			40.98			55.9	
	Ay. 64 - - - - -			40.98			54.4	
	Main - - - - -			40.89			54.8	
	Yarn. - - - - -			40.93 ₁			54.4 ₂	
	Ad. - - - - -			40.96			54.9	
7067	Müdl. - - - - -	20	24	17.31	29	57	9.5	
	Arm. - - - - -			17.29			9.5	
	Ay. 60 - - - - -			17.33			9.0	
	Yarn. - - - - -			17.29			9.4 ₂	
	Kbg. - - - - -			17.16			10.7 ₂	
	Main - - - - -			17.27			10.0	
	Ay. 73 - - - - -			17.26 ₁			8.4	
	Wn. 73 - - - - -			17.26			10.4	
	Ad. - - - - -			17.31			9.6	
7117	Müdl. - - - - -	20	30	46.90	25	27	0.5	
	Arm. - - - - -			46.98			1.2	
	R. C. ₂ - - - - -			46.80			0.9	
	Q. - - - - -			46.91 ₁	26	59.9 ₁		
	Ay. 64 - - - - -			46.85			59.8	
	Wn. 67 - - - - -			46.99	27	0.4		
	Ad. - - - - -			46.90			0.4	
7126	Müdl. - - - - -	20	31	44.63	26	1	41.0	Weight of Ay. 72 in decl., 1 ₂ .
	Arm. - - - - -			44.78 ₁			41.1 ₂	
	Yarn. - - - - -			44.71 ₂			41.3	
	Ay. 72 - - - - -			44.71 ₂			41.0	
	Ay. 73 - - - - -			.			40.7	
	Ad. - - - - -			44.69			41.0	

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
7140	Mädl. <i>corrected</i> - - - - -	20 32 56.31	20 45 48.9	Mädler included in decl.
	Arm. - - - - -	56.35 ₂	49.8 ₂	
	Ay. 64 - - - - -	56.29	48.5	
	Main - - - - -	56.36	49.5	
	Ad. - - - - -	56.33	49.1	
7143	Mädl. - - - - -	20 33 5.21	23 40 43.1	Weight of Ay. 40-45, 1 $\frac{1}{2}$. Pulcova gives 42''.8 from observations in 1844 and 1846.
	Hend. - - - - -	-	43.1	
	Arm. - - - - -	5.29	44.2	
	Ay. 40-45 - - - - -	-	42.4	
	Kbg. - - - - -	5.06 ₁	43.8 ₁	
	Ad. - - - - -	5.21	43.2	
7152	Hend. - - - - -	20 33 50.85	29 53 51.5	P. M. used (in decl.) — 0''.06 from Piazzi ; Lalande agrees nearly. The P. M. in A. R. must be very small.
	Arm. - - - - -	50.89 ₁	51.9 ₁	
	Q. - - - - -	-	50.6 ₁	
	Wn. 67 - - - - -	50.86	50.9	
	Main - - - - -	50.72 ₂	52.5	
	Ad. - - - - -	50.83	51.5	
7188	Mädl. - - - - -	20 39 28.05	24 49 29.2	
	Arm. - - - - -	27.95	27.6	
	Yarn. - - - - -	27.86	27.7	
	R. C. ₂ - - - - -	27.90	27.3	
	Q. - - - - -	27.90 ₂	26.4 ₂	
	Ay. 64 - - - - -	27.91	27.3	
	Ay. 72 - - - - -	28.03 ₁	27.9	
	Ay. 73 - - - - -	-	26.6 ₂	
	Ad. - - - - -	27.95	27.4	
7246	Mädl. - - - - -	20 46 46.69	26 37 49.3	2 obs. Kbg. gives 46''.64, 51''.7. The decl. has been excluded.
	Hend. - - - - -	-	47.3	
	Arm. - - - - -	46.64	49.6	
	Yarn. - - - - -	46.73 ₁	46.5 ₂	
	Ay. 72 - - - - -	46.64 ₁	48.0 ₂	
	Ay. 73 - - - - -	-	46.9	
	Ad. - - - - -	46.67	47.7	
7256	St. - - - - -	20 49 13.96	27 34 59.4	Most authorities receive double weight.
	Eng. - - - - -	13.93	60.0	
	Main 65 - - - - -	13.93	59.7	
	Leid. - - - - -	-	59.7	
	Main 70 - - - - -	13.96	60.0	
	Ay. 70 - - - - -	13.97	59.6	
	Pulc. - - - - -	14.01	59.1	
	Wn. 73 - - - - -	14.00	60.2	
	Ad. - - - - -	13.97	59.6	
7275	Mädl. - - - - -	20 52 41.20	21 50 39.9	
	Hend. - - - - -	-	37.8	
	Arm. - - - - -	41.14	38.1 ₂	
	Kbg. - - - - -	41.00 ₂	37.3 ₂	
	Main - - - - -	41.09	35.8	
	Ay. 64 - - - - -	41.00	36.6	
	Ay. 72 - - - - -	41.04	37.0	
	Ay. 73 - - - - -	-	36.8	
	Ad. - - - - -	41.07	37.0	
7354	Q. - - - - -	21 4 53.02 ₂	21 56 55.0 ₁	
	Ay. 64 - - - - -	53.09	55.9	
	Smyth - - - - -	53.15	-	
	Main - - - - -	53.15 ₂	57.8	
	Ad. - - - - -	53.11	56.5	
7356	Mädl. - - - - -	21 4 54.19	21 56 50.8	Bradley has no decl. The P. M. by Bessel, 1815, and Str., 1823, is less than — 0''.01, and has been omitted.
	Q. - - - - -	54.17 ₂	46.3 ₁	
	Ay. 64 - - - - -	54.15	47.0	
	Main - - - - -	54.25	48.0	
	Smyth - - - - -	54.27	47.6	
	Ad. - - - - -	54.21	47.4	

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h.</i> <i>m.</i> <i>s.</i>	<i>c</i> <i>'</i> <i>"</i>	
7361	Mädl. - - - - -	21 6 18.68	22 34 11.7	The P. M. used ($-0''.04$) was obtained by comparison with Piazz. Br. has no decl.
	Tayl. - - - - -	- - - - -	13.8 ₃	
	Arm. - - - - -	18.68	15.2	
	Ay. 64 - - - - -	18.64	14.0	
	Ad. - - - - -	18.67	14.4	
7368	St. - - - - -	21 7 37.07	29 42 54.6	
	Yarn. - - - - -	36.99	53.9	
	R. C. ₂ - - - - -	36.99	53.3	
	Ay. 64 - - - - -	37.01	54.2	
	Main 65 - - - - -	37.01	54.3	
	Arg. - - - - -	36.99	54.8	
	Eng. - - - - -	37.02	55.0	
	Wn. 70 - - - - -	37.02	54.9	
	Main 70 - - - - -	37.00	54.6	
	Ay. 70 - - - - -	36.98	54.1	
	Ad. - - - - -	37.02	54.4	
7410	Q. - - - - -	21 15 25.36 ₂	23 19 48.5 ₂	P. M. $+0''.009 - 0''.15$, from 2 obs. by Lalande; without it we should have 25 ^s .25 and 49 ^s .9.
	Smyth - - - - -	25.26	48.5	
	Main - - - - -	25.26	48.6	
	Wn. 72 - - - - -	25.36	49.3	
	Wn. 73 - - - - -	25.23	49.2	
	Ay. 72 - - - - -	25.31	49.5	
	Ay. 73 - - - - -	25.35 ₂	50.0 ₂	
	Ad. - - - - -	25.30	49.1	
7437	Hend. - - - - -	21 18 - - -	23 44 17.6	P. M. used in A. R., $+0''.010$; in decl., $0''.00$, from Piazz. and Lalande. For 1875.0, Lalande gives 21 ^s .4; Pi. gives 15 ^s .4.
	Arm. - - - - -	20.85	17.4 ₂	
	Q. - - - - -	20.90 ₁	15.9 ₂	
	Yarn. - - - - -	20.72 ₁	17.2 ₂	
	Main - - - - -	20.97	17.3	
	Ay. 71 - - - - -	20.94	16.5	
	Ay. 73 - - - - -	20.90 ₁	16.6	
	Ad. - - - - -	20.89	16.9	
7444	Hend. - - - - -	21 19 0.89	25 38 17.4	The negative P. M. indicated in declination is hardly confirmed by Piazz., which gives 16 ^s .5. I have omitted to consider it.
	Arm. - - - - -	0.93	16.6	
	Ay. 60 - - - - -	- - - - -	14.9 ₂	
	Kbg. - - - - -	0.91 ₂	17.1 ₂	
	Q. - - - - -	0.96 ₁	15.2 ₂	
	Ay. 64 - - - - -	0.97	15.4	
	Main - - - - -	1.09	15.3	
	Wn. 73 - - - - -	0.96	15.3	
	Ad. - - - - -	0.96	15.9	
7461	Mädl. - - - - -	21 22 9.70	27 3 54.9	
	Arm. - - - - -	9.65	54.3	
	R. C. ₂ - - - - -	9.55	53.9	
	Kbg. - - - - -	9.66 ₂	[58.9 ₂]	
	Q. - - - - -	9.52 ₂	54.9 ₂	
	Ay. 64 - - - - -	9.57	54.9	
	Ay. 71 - - - - -	- - - - -	54.6 ₂	
	Ad. - - - - -	9.61	54.5	
7474	Mädl. - - - - -	21 24 [17.38]	23 5 32.7	
	Kbg. - - - - -	17.20 ₂	30.7 ₂	
	Ay. 64 - - - - -	17.16	30.1	
	Q. - - - - -	17.12 ₂	30.2 ₂	
	Main - - - - -	17.14	31.3	
	Ay. 72 - - - - -	17.13	31.7	
	Wn. 73 - - - - -	17.11	29.7	
	Ad. - - - - -	17.14	30.6	
7568	Mädl. - - - - -	21 38 33.04	28 10 43.9	Ay. 60, 64 and Main have wt. = $\frac{1}{4}$ in decl.
	Arm. - - - - -	33.12	43.7	
	R. C. ₂ - - - - -	32.99	44.5	
	Yarn. - - - - -	33.07	42.7	
	Ay. 60, 64 - - - - -	33.16	43.1	
	Smyth - - - - -	33.17 ₁	43.5	
	Main - - - - -	33.10	43.4	
	Ad. - - - - -	33.09	43.3	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
7569	Ad. - - - - -	21	38	33.45	28	10	41.0	By differences from preceding star. Armagh gives 40".1.
7570	C. A. - - - - -	21	38	46.51	28	12	37.2	
	Tayl. - - - - -			46.66 ₂			35.7	
	Q. - - - - -			46.47 ₂			36.9	
	Yarn. - - - - -			46.49			37.3	
	Ad. - - - - -			46.53			36.8	
7571	Pulc. - - - - -	21	38	58.96	25	4	16.8	Weight for Pulc., 2; for Ay. 64-72, 1½ (12 obs.) in decl.
	Q. - - - - -			59.01 ₂			15.1	
	Kbg. - - - - -			59.10 ₂			17.3 ₂	
	Ay. 64-72 - - - - -			59.04			16.8	
	Ad. - - - - -			59.01			16.5	
7584	Arm. - - - - -	21	40	16.60	25	0	29.7	The star is not in Mädler.
	Q. - - - - -			16.50 ₂			28.4 ₂	
	R. C. ₂ - - - - -			16.45			28.2	
	Yarn. - - - - -			16.52 ₂			29.7	
	Ay. 64 - - - - -			16.52 ₂			29.8 ₂	
	Wn. 67 - - - - -			16.55			29.3	
	Ad. - - - - -			16.53			29.2	
7585	Mädl. - - - - -	21	40	[19.50]	22	22	25.2	I have used P. M. + 0".002 in A. R. instead of Mädler's + 0".060 = 0".004. If Arm. is excluded the declination would be 23".5.
	Arm. - - - - -			19.40			26.3	
	Ay. 64 - - - - -			19.30			22.9	
	Main - - - - -			19.26			24.1	
	Ad. - - - - -			19.32			24.4	
7586	Mädl. <i>corrected</i> - - - - -	21	40	42.47	24	59	8.0	Armagh gives 42".52 and 10".4; declination rejected.
	Q. - - - - -			42.47 ₂			6.0 ₂	
	R. C. ₂ - - - - -			42.66 ₂			4.8	
	Ay. 64 - - - - -			42.50			8.5	
	Wn. 67 - - - - -			42.49			7.5	
	Ad. - - - - -			42.52			7.0	
7607	Mädl. - - - - -	21	44	18.87	29	35	35.8	
	Arm. - - - - -			18.86			35.3	
	Ay. 60 - - - - -			18.91			34.3	
	Kbg. - - - - -			18.88 ₂			34.9 ₂	
	Ad. - - - - -			18.88			34.8	
7623	Mädl. <i>corrected</i> - - - - -	21	46	55.16	28	12	33.4	
	Arm. - - - - -			55.17			33.7	
	Yarn. - - - - -			55.06			32.9	
	Kbg. - - - - -			55.09 ₂			35.4 ₂	
	Ad. - - - - -			55.12			33.7	
7627	St. - - - - -	21	47	22.49	25	20	15.8	Wn. 73 has a single weight.
	Yarn. - - - - -			22.48			15.3	
	Main 65 - - - - -			22.46			15.7	
	Eng. - - - - -			22.51			16.1	
	Main 70 - - - - -			22.49			16.5	
	Leid. - - - - -			-			16.2	
	Ay. 70 - - - - -			22.50			16.0	
	Pulc. - - - - -			22.51			15.5	
	Wn. 73 - - - - -			22.57			15.7	
	Ad. - - - - -			22.49			15.9	
7693	Mädl. - - - - -	21	59	[54.63]	28	21	29.4	
	Hend. - - - - -			-			27.7	
	Arm. - - - - -			54.90 ₂			27.8	
	Ay. 64 - - - - -			54.94			26.1	
	Main - - - - -			54.88			27.1	
	Ay. 72 - - - - -			-			26.6	
	Ay. 73 - - - - -			54.91 ₂			26.4	
	Ad. - - - - -			54.91			26.9	
7706	St. - - - - -	22	1	11.52	24	44	7.4	Most authorities have weight 1½.
	Ay. 64 - - - - -			11.55			6.8	
	Main 65 - - - - -			11.44			6.8	
	Main 70 - - - - -			11.57			8.2	
	Yarn. - - - - -			11.58 ₂			6.1 ₂	
	Ay. 70 - - - - -			11.56			7.1	
	Ay. 73 - - - - -			11.55 ₂			7.4 ₂	
	Ad. - - - - -			11.54			7.2	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
7712	Mädl. - - - - -	22	1	58.29	21	5	44.6	Main has weight $1\frac{1}{2}$ in decl. (9 obs.).
	Arm. - - - - -			58.11 ₂			41.8 ₂	
	Kbg. - - - - -			58.08 ₁			43.9 ₁	
	Ay. 64 - - - - -			58.13			42.2	
	Main - - - - -			58.14			43.1	
	Ad. - - - - -			58.16			42.7	
7733	Mädl. <i>corrected</i> - - - - -	22	4	35.83	20	21	53.5	Mädler included in final declination.
	Arm. - - - - -			35.75 ₂			52.9	
	Ay. 64 - - - - -			35.73			51.8	
	Main - - - - -			35.70			51.6	
	Ad. - - - - -			35.75			52.4	
7757	Tayl. - - - - -	22	7	55.27	27	59	20.3	P. M. used $+ 0^{\circ}.005 - 0''.04$ (chiefly from Piazz).
	Arm. - - - - -			[55.09]			23.2	
	Q. - - - - -			54.95 ₁			20.1 ₁	
	Kbg. - - - - -			54.94 ₂			22.1 ₂	
	Main - - - - -			55.06 ₃			22.8	
	Ad. - - - - -			55.08			22.0	
7798	Mädl. - - - - -	22	15	33.19	27	42	4.0	Mädler's P. M. in A. R. and his A. R. has been omitted. Weight of Ay. 64, 2; of Ay. 70, $1\frac{1}{2}$.
	Arm. - - - - -			33.17			6.5	
	Yarn. - - - - -			33.06			4.5	
	Ay. 64 - - - - -			33.08			5.2	
	Wn. 67 - - - - -			33.07			4.2	
	Ay. 70 - - - - -			32.94			5.4	
	Ad. - - - - -			33.06			5.3	
7807	Mädl. - - - - -	22	17	38.77	20	13	2.2	
	Arm. - - - - -			38.80			2.5	
	Q. - - - - -			38.63			2.0	
	R. C. ₂ - - - - -			38.65			2.2	
	Yarn. - - - - -			38.66			2.0	
	Ay. 64 - - - - -			38.69			1.5	
	Ay. 72 - - - - -			38.71 ₂			1.4 ₂	
	Ad. - - - - -			38.70			2.0	
7914	Mädl. - - - - -	22	35	53.49	28	39	20.5	
	Arm. - - - - -			53.50			20.5	
	Yarn. - - - - -			53.44 ₁			19.2	
	Ay. 60 - - - - -			53.42			20.0	
	Kbg. - - - - -			53.26 ₁			[23.4 ₁]	
	Ay. 71 - - - - -			-			20.7	
	Ay. 73 - - - - -			-			20.7 ₂	
	Ad. - - - - -			53.44			20.1	
7923	St. - - - - -	22	37	8.68	29	34	4.8	Weight of R. C. ₂ , Main, Ay. 72-73, $1\frac{1}{2}$ each; of St., 5.
	R. C. ₂ - - - - -			8.70			5.7	
	Yarn. - - - - -			8.63 ₂			3.6	
	Kbg. - - - - -			8.68			5.3	
	Main - - - - -			8.55			4.9	
	Ay. 72-73 - - - - -			8.66			4.7	
	Ad. - - - - -			8.65			4.8	
7945	St. - - - - -	22	40	30.65	22	54	30.2	Weight of St. and Leid., 2 each; of Ay. 70 (14 obs.), $1\frac{1}{2}$.
	Yarn. - - - - -			30.58			29.9 ₂	
	Ay. 70 - - - - -			30.67			29.6	
	Leid. - - - - -			-			30.2	
	Ad. - - - - -			30.64			30.0	
7958	St. - - - - -	22	43	58.26	23	56	31.1	The P. M. of St., instead of $- 0^{\circ}.0013 - 0''.026$, should be $+ 0^{\circ}.0110 - 0''.050$. It seems to be an error of copying from Br. 3013 = τ^2 Aquarii (Mädler, p. 62). Weights of Ay. 64 and 70, 2; of Main 65 and 70, $1\frac{1}{2}$ each.
	R. C. ₂ - - - - -			58.22			31.3	
	Yarn. - - - - -			58.10			31.0 ₂	
	Ay. 64 - - - - -			58.26			31.6	
	Main 65 - - - - -			58.18			30.7	
	Main 70 - - - - -			58.31			31.7	
	Ay. 70 - - - - -			58.26			31.5	
	Ad. - - - - -			58.24			31.3	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
7997	Mädl. - - - - -	22	51	19.69	20	5	58.0	
	Arm. - - - - -			19.64			57.1	
	R. C. ₂ - - - - -			19.52			57.2	
	Q. - - - - -			19.53 ₂			56.1 ₂	
	Ay. 64 - - - - -			19.60 ₂			56.3 ₂	
	Ay. 72 - - - - -			19.62 ₁			56.5	
	Ad. - - - - -			19.61			56.7	
8032	St. - - - - -	22	57	42.95	27	24	18.7	Weight of St., 5.
	Yarn. - - - - -			42.89			20.0	
	Ay. 72 - - - - -			42.84 ₁			18.3	
	Wn. 72-73 - - - - -			42.86			18.0	
	Ad. - - - - -			42.92			18.6	
8052	Mädl. - - - - -	23	1	1.66	24	47	39.8	Weights of Ay. 64 and 70, 1 $\frac{1}{2}$.
	Arm. - - - - -			1.70 ₂			38.1	
	Ay. 60 - - - - -			1.54			38.1	
	Ay. 64 - - - - -			1.48			38.1	
	Yarn. - - - - -			1.50 ₂			39.8 ₂	
	Ay. 70 - - - - -			1.50			38.4	
	Ad. - - - - -			1.56			38.4	
8079	Mädl. - - - - -	23	5	45.11	26	10	22.1	
	Arm. - - - - -			45.06			21.8	
	Yarn. - - - - -			45.18			20.9	
	Q. - - - - -			45.13			19.8	
	R. C. ₂ - - - - -			45.20			20.0	
	Ay. 64 - - - - -			45.24			21.3	
	Ay. 71 - - - - -			45.29			21.0	
	Ay. 73 - - - - -			45.24			20.7	
	Ad. - - - - -			45.18			20.8	
8091	Mädl. - - - - -	23	8	51.88	27	23	35.7	Mädler has but one (Lalande) declination. The P. M. indicated is not confirmed by Bessel's zones.
	Arm. - - - - -			51.72			26.8	
	Yarn. - - - - -			51.67 ₂			20.8	
	Smyth - - - - -			51.88			25.4	
	Main - - - - -			51.87 ₂			27.2	
	Ay. 64 - - - - -			51.78			25.9	
	Ad. - - - - -			51.80			26.4	
8097	Mädl. - - - - -	23	9	40.14	27	34	0.5	
	Arm. - - - - -			40.05 ₂			1.5	
	Q. - - - - -			40.10 ₂			0.5 ₂	
	Ay. 64 - - - - -			40.09			0.2	
	Main - - - - -			40.03			0.9	
	Ay. 72 - - - - -			40.06 ₂			0.2	
	Ay. 73 - - - - -						0.2 ₂	
	Wn. 73 - - - - -			40.12			1.7	
8099	Ad. - - - - -			40.09			0.7	
	Tayl. - - - - -	23	9	57.73 ₁	27	32	42.2 ₁	
	R. - - - - -			57.50 ₁			43.7 ₁	
	Q. - - - - -			57.77 ₂			45.4 ₁	
	Main - - - - -			57.66 ₁			46.3 ₁	
8131	Ad. - - - - -			57.68			44.4	Piazzi and Lalande indicate a negative P. M. in decl. I have assumed zero.
	St. - - - - -	23	14	27.11	23	3	22.9	
	Pule. - - - - -			27.09			23.0	
	Ay. 72 - - - - -			27.06			22.5	
	Ad. - - - - -			27.09			22.9	
8133	Mädl. - - - - -	23	14	42.19	29	43	60.9	
	Arm. - - - - -						60.8	
	Kbg. - - - - -			42.44 ₁			57.3 ₁	
	Ay. 64 - - - - -			42.31 ₂			58.5 ₂	
	Main - - - - -			42.36 ₂			59.0 ₂	
	Ad. - - - - -			42.30			59.0	
8146	Mädl. - - - - -	23	16	27.20	20	8	40.1	
	Arm. - - - - -			27.20			40.1 ₂	
	R. C. ₂ - - - - -			27.04			37.6 ₂	
	Kbg. - - - - -			27.29 ₁			40.8 ₁	
	Ay. 64 - - - - -			27.07			38.5	
	Ad. - - - - -			27.10			39.1	

107

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h.</i> <i>m.</i> <i>s.</i>	<i>°</i> <i>'</i> <i>"</i>	
8160	St. - - - - -	23 19 8.53	22 42 58.2	
	Yarn. - - - - -	8.49	58.1	
	Kbg. - - - - -	8.47 ₂	59.3 ₂	
	Q. - - - - -	-	56.9 ₂	
	Ay. 72 - - - - -	8.55 ₁	57.7	
	Ay. 73 - - - - -	-	57.8	
	Pule. - - - - -	8.52	58.2	
	Ad. - - - - -	8.52	58.1	
8174	Mädl. - - - - -	23 21 27.71	24 28 51.8	
	Arm. - - - - -	27.66	51.4	
	Ay. 64 - - - - -	27.82	50.8	
	Q. - - - - -	27.84 ₂	50.2 ₂	
	Main - - - - -	27.81 ₂	51.1	
	Yarn. - - - - -	27.88	52.4 ₂	
	Ad. - - - - -	27.78	51.2	
8203	Mädl. - - - - -	23 27 12.78	21 48 33.0	The declinations from Ay. (34 and 25 obs.) have double weight.
	Yarn. - - - - -	12.65	33.5	
	Kbg. - - - - -	12.66 ₁	34.2 ₂	
	Q. - - - - -	12.60	31.2 ₂	
	Ay. 64 - - - - -	12.64	32.6	
	Yarn. - - - - -	12.76	32.4 ₂	
	Ay. 70 - - - - -	12.88	32.3	
	Ad. - - - - -	12.73	32.7	
8256	Mädl. - - - - -	23 37 42.49	28 40 9.9	Weight of Ay. 72, 1 $\frac{1}{2}$.
	Arm. - - - - -	42.38	9.2	
	R. C. ₂ - - - - -	42.38	8.4	
	Ay. 60 - - - - -	42.43	9.9	
	Ay. 72 - - - - -	42.33	9.7	
	Ad. - - - - -	42.40	9.3	
8284	Mädl. - - - - -	23 43 20.02	28 8 50.0	Main (15 obs. in decl.) has weight = 1 $\frac{1}{2}$.
	Arm. - - - - -	19.88	48.6	
	Q. - - - - -	20.06 ₂	48.2 ₂	
	Ay. 64 - - - - -	19.97	47.9	
	Main 70 - - - - -	19.95	48.7	
	Ay. 72 - - - - -	19.95 ₂	47.7	
	Ad. - - - - -	19.97	48.3	
8296	Mädl. - - - - -	23 46 2.86	20 58 34.9	
	Arm. - - - - -	2.77	33.6	
	Ay. 64 - - - - -	2.79	32.5	
	Main - - - - -	2.74	33.8	
	Ad. - - - - -	2.79	33.3	
8301	Mädl. - - - - -	23 46 19.09	21 2 51.0	
	Arm. - - - - -	19.14	53.8 ₁	
	Kbg. - - - - -	19.11 ₁	52.0 ₁	
	Ay. 64 - - - - -	19.15	52.8	
	Main - - - - -	[19.66 ₁]	54.6 ₂	
	Ad. - - - - -	19.12	53.3	
8324	Mädl. - - - - -	23 51 23.62	24 26 48.4	Ay. has double weight each time; Main, 1 $\frac{1}{2}$; in declination only.
	Arm. - - - - -	23.55	47.6	
	Yarn. - - - - -	23.54 ₂	47.1	
	Q. - - - - -	23.49	46.7 ₂	
	Ay. 64 - - - - -	23.47	48.0	
	Main - - - - -	23.48	47.6	
	Ay. 70 - - - - -	23.44	48.2	
	Ad. - - - - -	23.51	47.7	
8337	Mädl. - - - - -	23 54 0.42	26 13 26.0	
	Arm. - - - - -	0.18	27.2	
	Q. - - - - -	0.20	27.4	
	Main - - - - -	0.36	26.5	
	Ay. 73 - - - - -	0.29 ₂	25.7 ₂	
	Ad. - - - - -	0.29	26.8	

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
8350	Mädl. - - - - -	23 55 38.87	26 25 15.8	Q. and Smyth have weight, $1\frac{1}{2}$; the latter in declination only.
	R. C. ₂ - - - - -	38.52	11.1	
	Arm. - - - - -	38.58 ₂	13.0 ₃	
	Q. - - - - -	38.61	14.8	
	Smyth - - - - -	38.71	14.3	
	Ay. 64 - - - - -	38.62	13.7	
	Ay. 73 - - - - -	38.63	14.1	
	Ad. - - - - -	38.65	13.7	
8374	Mädl. - - - - -	0 0 7.40	28 19 53.8	Weights of Q. and Ay. 64, $1\frac{1}{2}$.
	Arm. - - - - -	7.58	55.3	
	R. C. ₂ - - - - -	7.61	53.4	
	Ay. 60 - - - - -	- - -	54.9 ₂	
	Q. - - - - -	7.50 ₁₃	54.2	
	Kbg. - - - - -	7.48 ₂	55.4 ₂	
	Ay. 64 - - - - -	7.63 ₁₀	53.6	
	Ay. 70 - - - - -	7.62	54.2 ₅	
	Yarn. - - - - -	7.29 ₁	54.7 ₂	
	Ad. - - - - -	7.55	54.3	
4	St. - - - - -	0 1 55.73	28 24 1.1	
	Yarn. - - - - -	55.73	1.1	
	R. C. ₂ - - - - -	55.67	1.1	
	Ay. 64 - - - - -	55.71	1.0	
	Gyld. - - - - -	- - -	0.9	
	Main 65 - - - - -	55.66	0.9	
	Main 70 - - - - -	55.72	1.0	
	Wn. 70 - - - - -	- - -	- - -	
	Leid. - - - - -	- - -	1.3	
	Ay. 70 - - - - -	55.72	1.0	
	Ad. - - - - -	55.71	1.1	
109	Mädl. - - - - -	0 23 [32.06]	29 3 43.8	Mädler's A. R. and his P. M. in A. R. omitted. Ay. 64 has weight 2 in decl.; Ay. 70 weight, $1\frac{1}{2}$.
	Arm. - - - - -	31.66	42.2	
	Yarn. - - - - -	31.64	43.4	
	Ay. 64 - - - - -	31.77	44.2	
	Main - - - - -	31.66	43.8	
	Ay. 70 - - - - -	31.77	43.5	
	Ad. - - - - -	31.70	43.5	
164	St. - - - - -	0 31 57.21	28 37 57.9	Weight to Main 65 and Main 70, $1\frac{1}{2}$.
	Arm. - - - - -	57.22	58.7 ₂	
	R. C. ₂ - - - - -	57.25	58.7	
	Q. - - - - -	- - -	57.0 ₄	
	Kbg. - - - - -	57.23	59.5	
	Main 65 - - - - -	57.17	57.9	
	Main 70 - - - - -	57.18	58.2	
	Yarn. - - - - -	57.12	57.2	
	Ay. 70-73 - - - - -	57.20	58.0	
	Ad. - - - - -	57.20	58.1	
168	Mädl. - - - - -	0 32 51.66	20 34 33.7	
	Arm. - - - - -	51.57	34.0	
	R. C. ₂ - - - - -	51.67	31.4	
	Ay. 64 - - - - -	51.66	32.9	
	Main - - - - -	51.70	32.1	
	Ad. - - - - -	51.65	32.6	
170	Mädl. - - - - -	0 33 20.86	20 45 8.7	
	Arm. - - - - -	20.83	8.2	
	R. C. ₂ - - - - -	20.75 ₂	8.0	
	Yarn. - - - - -	20.96 ₃	9.4 ₂	
	Ay. 64 - - - - -	20.84	8.0	
	Main - - - - -	20.96 ₃	8.6	
	Ad. - - - - -	20.86	8.4	
178	Tayl. - - - - -	0 34 58.44 ₁	23 56 37.2	Piazzi and LL. indicate no P. M. in decl.; the A. R. is rather uncertain.
	Arm. - - - - -	58.19	36.2	
	R. C. ₂ - - - - -	58.23	36.4	
	Ay. 64 - - - - -	58.25	36.4	
	Ay. 72 - - - - -	58.28	35.2	
	Ad. - - - - -	58.26	36.3	

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
215	St. - - - - -	0 40 42.95	23 35 12.8	
	Arm. - - - - -	42.96	12.6	
	Yarn. - - - - -	42.90 ₂	11.8 ₂	
	Q. - - - - -	42.87 ₂	13.6 ₂	
	Ay. 72 - - - - -	42.91	12.4	
	Ad. - - - - -	42.93	12.7	
217	Mädl. - - - - -	0 41 17.02	20 14 29.5	
	Arm. - - - - -	17.08 ₂	32.0	
	R. C. ₂ - - - - -	17.22	31.1	
	Ay. 64 - - - - -	17.13	31.5	
	Yarn. - - - - -	17.15 ₂	30.8	
	Ad. - - - - -	17.12	31.4	
224	Hend. - - - - -	0 42 27.43	28 2 15.9	Lalande agrees very nearly without P. M.
	Jac. - - - - -	[27.08]	14.7	
	Yarn. - - - - -	27.55 ₂	16.4 ₂	
	Q. - - - - -	27.65 ₂	15.1 ₁	
	Main - - - - -	27.62	16.7	
	Smyth - - - - -	27.58	16.0	
	Ad. - - - - -	27.56	15.8	
229	Mädl. - - - - -	0 43 10.26	27 1 46.5	Mädler's and the Armagh A. R. refer to the preceding star, most probably. The position here given refers to the middle point between the stars.
	Arm. - - - - -	10.16	45.5	
	R. C. ₂ - - - - -	10.52	44.1	
	Ay. 64 - - - - -	10.58	44.8	
	Yarn. - - - - -	10.48	45.6	
	Main - - - - -	10.47	46.1	
	Ad. - - - - -	10.51	45.2	
250	Mädl. - - - - -	0 48 16.50	22 57 3.2	
	Arm. - - - - -	16.54	[5.5]	
	R. C. ₂ - - - - -	16.65	2.6	
	Ay. 64 - - - - -	16.58	3.2	
	Main - - - - -	16.66	3.3	
	Ay. 72 - - - - -	16.64	3.0	
	Ad. - - - - -	16.60	3.0	
256	Mädl. - - - - -	0 49 15.35	26 31 52.9	
	Arm. - - - - -	15.46	52.7	
	Main - - - - -	15.40	52.6	
	Wn. 67 - - - - -	15.27	52.0	
	Ay. 73 - - - - -	15.28	52.5	
	Ad. - - - - -	15.35	52.4	
263	Jacob. - - - - -	0 50 31.00	26 19 20.6	Lalande indicates a P. M. in decl. of about -0''.06, which is contradicted by Jacob. I have used zero.
	Yarn. - - - - -	31.24 ₂	21.9	
	Q. - - - - -	31.24 ₂	21.0 ₂	
	Ay. 64 - - - - -	31.22	21.7	
	Smyth - - - - -	31.37 ₁	22.5	
	Wn. 67 - - - - -	31.23	21.9	
	Ad. - - - - -	31.23	21.6	
264	Mädl. - - - - -	0 50 32.20	22 44 33.3	
	Arm. - - - - -	32.09	33.8 ₂	
	Ay. 60 - - - - -	32.09	32.0	
	Yarn. - - - - -	32.04	30.9 ₂	
	Ay. 72 - - - - -	32.04	31.8	
	Ad. - - - - -	32.09	32.1	
267	Mädl. - - - - -	0 51 [4.26]	28 18 57.3	A. R. rather insecure.
	Arm. - - - - -	[4.23]	56.4	
	Ay. 64 - - - - -	4.37	57.5	
	Main. - - - - -	4.40	55.8	
	Ad. 72 - - - - -	4.47	57.9	
	Ad. - - - - -	4.41	56.9	
299	Hend. - - - - -	0 57 38.03	28 59 28.0	The P. M. assumed + 0''.014 - 0''.12 from Lalande is confirmed by the modern observations.
	Jacob. - - - - -	[37.77]	29.0	
	Arm. - - - - -	38.25	29.1	
	Q. - - - - -	38.00 ₁	28.5	
	Main - - - - -	38.04	28.5	
	Smyth - - - - -	.	28.5	
	Ad. - - - - -	38.09	28.6	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
307	Mädl. - - - - -	0	58	59.03	20	48	12.6	
	Arm. - - - - -			58.95			12.9	
	R. C. ₃ - - - - -			58.96 ₂			10.8	
	Ay. 64 - - - - -			58.87			11.6	
	Main - - - - -			59.13			13.1	
	Ad. - - - - -			58.99			12.1	
308	Mädl. - - - - -	0	58	59.69	20	47	44.1	
	Arm. - - - - -			59.85			[40.5]	
	R. C. ₃ - - - - -			59.83 ₃			43.8	
	Ay. 64 - - - - -			59.64			43.9	
	Main - - - - -			59.68			43.4 ₁	
	Ad. - - - - -			59.73			43.7	
348	Mädl. <i>corrected</i> - - - - -	1	4	44.30	20	22	10.2	Pulcova gives 10".8 as reduced after the ms. was completed.
	Ay. 60 - - - - -			44.18			10.7	
	Yarn. - - - - -			44.16			10.0 ₂	
	Ad. - - - - -			44.21			10.4	
349	St. - - - - -	1	4	[46.87]	29	25	31.7	The position St. has been affected by the errors in Mädler's P. M. I have used + 0".004 in A. R. and 0".00 [from Answers] in decl. P. M. in decl. from Mädler confirmed by Piazz.
	Arm. - - - - -			[46.50]			32.8	
	Main - - - - -			46.69			33.4	
	Ay. 64 - - - - -			46.80			32.9	
	Q. - - - - -			46.74 ₁			31.9 ₂	
	Ay. 73 - - - - -			46.66 ₁			32.0 ₁	
358	Mädl. - - - - -	1	6	6.73	29	24	4.2	
	Arm. - - - - -			6.48 ₂			4.8	
	R. C. ₃ - - - - -			6.63 ₂			2.0 ₂	
	Ay. 64 - - - - -			6.50			4.8	
	Q. - - - - -			6.51 ₁			3.5 ₂	
	Ad. - - - - -			6.58			4.0	
365	Mädl. - - - - -	1	6	57.77	23	55	17.0	
	Arm. - - - - -			57.69 ₁			18.3	
	Ay. 64 - - - - -			57.83			15.6	
	Main - - - - -			57.76			17.7	
	Ad. - - - - -			57.77			17.2	
395	St. - - - - -	1	12	35.96	26	36	23.3	
	Arm. - - - - -			35.98			22.5	
	Q. - - - - -			35.99 ₂			21.5 ₂	
	Main - - - - -			36.02			23.0	
	Wn. 67 - - - - -			35.96			23.2	
	Ay. 70 - - - - -			35.92			21.9	
	Ad. - - - - -			35.97			22.8	
401	Mädl. - - - - -	1	14	12.87	28	5	4.1	
	Arm. - - - - -			12.90			4.7	
	Ay. 64 - - - - -			12.83			2.2	
	Main - - - - -			12.85			3.3	
	Ad. - - - - -			12.86			3.4	
514	Mädl. - - - - -	1	34	35.56	29	24	52.7	
	Arm. - - - - -			35.52			50.1	
	Jacob. - - - - -			[35.21]			50.8	
	R. C. ₃ - - - - -			35.51			50.8 ₁	
	Kbg. - - - - -			35.68			50.7 ₁	
	Ay. 64 - - - - -			35.54			51.3	
	Smyth - - - - -			35.63			51.2	
	Q. - - - - -			35.48 ₁			50.0 ₁	
	Yarn. - - - - -			[35.78]			49.4	
	Ad. - - - - -			35.57			50.5	
519	Tayl. - - - - -	1	35	3.21	28	52	22.9	The P. M. used in decl. (— 0".03) is from Piazz, compared with modern observations.
	Kbg. - - - - -			2.82 ₁			25.0 ₁	
	Main - - - - -			2.92			23.2	
	Ad. - - - - -			3.03			23.4	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
556	Kbg. - - - - -	1	43	14.26 ₁	21	39	12.8 ₁	There may be P. M. of $-0''.02$, which would change the adopted declination a very trifle.
	Q. - - - - -			14.29			12.6 ₁	
	Ay. 64 - - - - -			14.26			13.9	
	Main - - - - -			14.32			12.8	
	Wn. 67 - - - - -			14.37			12.9	
	Yarn. - - - - -			14.41 ₂			12.9 ₂	
	Ad. - - - - -			14.32			13.0	
569	St. - - - - -	1	45	57.58	28	58	8.1	Ay. 73 depends on 11 obs. in decl., and has the weight 1 $\frac{1}{2}$.
	Arm. - - - - -			57.59			8.2	
	R. C. ₂ - - - - -			57.55			10.7	
	Q. - - - - -			57.55			7.7	
	Yarn. - - - - -			57.53			6.9	
	Ay. 73 - - - - -			57.55			8.0	
	Ad. - - - - -			57.56			8.3	
577	St. - - - - -	1	47	44.23	20	11	46.1	
	R. C. ₂ - - - - -			44.22			46.4	
	Ay. 64 - - - - -			44.22			46.0	
	Main 65 - - - - -			44.20			46.3	
	Arg. - - - - -			44.29			46.5	
	Eng. - - - - -			44.21			47.0	
	Leid. - - - - -						46.6	
	Ay. 70 - - - - -			44.22			45.6	
	Main 70 - - - - -			44.21			45.9	
	Ad. - - - - -			44.23			46.3	
581	Mädl. - - - - -	1	48	52.83	22	57	49.6	
	Arm. - - - - -			52.65			49.2	
	R. C. ₂ - - - - -						48.3 ₂	
	Q. - - - - -			52.84 ₂			49.2 ₂	
	Bonn. - - - - -			53.01			49.2	
	Ay. 64 - - - - -			52.93			49.0	
	Wn. 67 - - - - -			52.95 ₂			50.2	
	Yarn. - - - - -						48.5	
	Ad. - - - - -			52.90			49.1	
593	Mädl. - - - - -	1	50	57.85	22	59	8.1	
	Arm. - - - - -			57.99			6.5 ₁	
	Kbg. - - - - -			58.08 ₁			7.7 ₁	
	Q. - - - - -			57.88			5.9	
	Ay. 64 - - - - -			57.85			7.4	
	Main - - - - -			57.97			7.1	
	Ay. 73 - - - - -			57.96			7.0	
	Ad. - - - - -			57.93			6.9	
607	Tayl. - - - - -	1	52	39.56	20	27	3.1	I have used P. M. + $0''.010$ in A. R. and $0''.00$ in decl.
	Hend. - - - - -			39.45			3.2	
	Arm. - - - - -			39.47			3.6 ₂	
	Q. - - - - -			39.48			1.0 ₁	
	R. C. ₂ - - - - -			39.59			1.3	
	Yarn. - - - - -			39.58			2.2	
	Ad. - - - - -			39.52			2.5	
630	Mädl. - - - - -	1	56	33.90	25	19	56.5	
	Arm. - - - - -			33.94			54.6	
	R. C. ₂ - - - - -			33.77			[49.9 ₁]	
	Ay. 64 - - - - -			33.82			56.2	
	Q. - - - - -			33.82			54.7 ₂	
	Wn. 67 - - - - -			33.88			55.4	
	Ad. - - - - -			33.85			55.3	
637	Mädl. - - - - -	1	57	16.32	25	19	6.6	
	Arm. - - - - -			16.46 ₁			6.4	
	R. C. ₂ - - - - -			16.33 ₂			6.0	
	Ay. 64 - - - - -			16.34			7.7	
	Q. - - - - -			16.21 ₁			6.3	
	Ad. - - - - -			16.33			6.6	

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
644	Mädl. - - - - -	1 59 [34.64]	22 3 7.5	
	Arm. - - - - -	34.33 ₂	5.7	
	R. C. ₂ - - - - -	34.26 ₁	3.9 ₂	
	Q. - - - - -	34.37 ₂	5.1 ₂	
	Ay. 64 - - - - -	34.41	5.4	
	Wn. 67 - - - - -	34.43	5.3	
	Ay. 73 - - - - -	34.41 ₁	4.9	
	Ad. - - - - -	34.38	5.1	
645	Mädl. - - - - -	1 59 37.22	25 14 4.8	Smyth has weight = 1½. There is no large P. M., as assigned by Mädler. The earlier obs. are rather discordant.
	Hend. - - - - -	-	0.6	
	Arm. - - - - -	37.46 ₂	0.0	
	Ay. 64 - - - - -	37.67	13 58.7	
	Main - - - - -	37.57	59.1	
	Q. - - - - -	37.81 ₁	59.1 ₁	
	Smyth - - - - -	37.70	59.1	
	Ad. - - - - -	37.63	59.4	
647	Mädl. - - - - -	1 59 44.15	25 6 27.7	
	Arm. - - - - -	-	26.2	
	Ay. 64 - - - - -	44.31	25.9	
	Main - - - - -	44.03	27.4	
	Smyth - - - - -	44.26 ₂	26.7 ₁	
	Q. - - - - -	44.24 ₁	25.8 ₁	
	Ad. - - - - -	44.19	26.4	

DETAILS OF POSITIONS—DIVISION III.

BRITISH ASSOCIATION CATALOGUE STARS.

FROM $+60^{\circ}$ TO $+70^{\circ}$ DECLINATION.

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
4222	Mädl. - - - - -	12	24	37.68	69	53	36.8	Ay. and Main receive weight $1\frac{1}{2}$ each in decl.
	Arm. - - - - -			38.00			37.7	
	R. C. ₂ - - - - -			37.77 ₂			36.6	
	Q. - - - - -			37.73 ₂			38.4 ₂	
	Ay. 60 - - - - -			-			38.3	
	Ay. 64 - - - - -			37.51			37.9	
	Main 66 - - - - -			-			37.8	
	Ay. 69 - - - - -			37.59 ₂			38.0	
	Ay. 71 - - - - -			37.2 ₂			38.0	
	Main 70 - - - - -			37.49 ₁			38.2	
	Yarn. 72 - - - - -			-			39.0 ₂	
	Ad. - - - - -			37.63			38.0	
4276	St. - - - - -	12	36	5.80	63	23	58.3	
	LeV. - - - - -			-			58.0	
	Pule. - - - - -			5.81			58.3	
	Ay. 71 - - - - -			5.81			59.0	
	Ad. - - - - -			5.81			58.4	
4300	R. - - - - -	12	41	58.18	63	27	49.0	I have corrected Jacob's decl. by $+5''$. Fed. and Gr. indicate a P. M. of $-0''.03$ in decl. I have not used it. It would give a decl. of $49''.0$ for 1875.
	Arm. - - - - -			58.09			50.1	
	R. C. - - - - -			58.38			49.8	
	Jac. - - - - -			[57.85]			50.1	
	Ay. 73 - - - - -			58.23			49.9	
	Ad. - - - - -			58.22			49.8	
4302	Mädl. - - - - -	12	42	27.26	67	28	23.4	Main's declinations have a weight $1\frac{1}{2}$ each.
	Arm. - - - - -			27.16 ₂			23.1	
	R. C. ₂ - - - - -			27.23			24.0	
	Q. - - - - -			27.34			22.1 ₂	
	Ay. 64 - - - - -			27.18			22.4	
	Main 67 - - - - -			-			23.3	
	Main 71 - - - - -			27.45			22.8	
	Ay. 72 - - - - -			27.32 ₁			23.1	
	Ad. - - - - -			27.28			23.0	
4305	R. - - - - -	12	43	12.47	61	0	7.3	
	Arm. - - - - -			12.42 ₁			6.6	
	R. C. - - - - -			12.42			7.8	
	Jac. - - - - -			[12.05]			6.9	
	LeV. - - - - -			-			6.5	
	Q. - - - - -			12.54 ₂			6.8	
	Ay. - - - - -			12.60 ₂			7.4 ₁	
	Ad. - - - - -			12.49			7.0	
4347	St. - - - - -	12	50	29.70	66	7	0.3	
	Pule. - - - - -			29.63			1.1	
	Ay. - - - - -			29.26			0.9	
	Ad. - - - - -			29.58			0.7	
4365	Mädl. - - - - -	12	55	11.68	67	16	18.2	Weights to Ay. 70 and Ay. 73 (in decl.), $1\frac{1}{2}$ each.
	Arm. - - - - -			11.50			17.8	
	R. C. ₂ - - - - -			11.64			19.1	
	Q. - - - - -			11.56			17.5 ₁	
	Ay. 60 - - - - -			-			18.6 ₂	
	Ay. 64 - - - - -			11.47			18.5	
	Yarn. - - - - -			11.40			18.4	
	Ay. 70 - - - - -			11.46			18.4	
	Ay. 73 - - - - -			11.39			19.3	
	Ad. - - - - -			11.51			18.5	
4371	T. - - - - -	12	56	53.60	64	16	56.8	The P. M. in decl. seems to be zero. Pi. gives $54''.3$, and Gr. $55''.3$, reduced to 1875.0. Pule. not included in catalogue positions; it was received later. With it A. R. = $53''.59$, decl. $55''.3$.
	H. - - - - -			53.74			54.9	
	R. C. - - - - -			53.52			55.9	
	Arm. - - - - -			53.50			55.8	
	Ch. - - - - -			-			54.5 ₁	
	Q. - - - - -			53.65 ₂			54.7 ₂	
	Pule. - - - - -			53.61			54.5	
	Ay. 72 - - - - -			53.48 ₂			55.0 ₂	
	Ad. - - - - -			53.58			55.6	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
4392	T. - - - - -	13	1	26.54	62	42	44.1	The P. M. used (+ 0".005 and - 0".06) agrees well with Pi. and Gr., and with Fed. in A. R.; but in decl. Fed. is 7" to 8" too far south.
	H. - - - - -			26.53			44.4	
	R. C. - - - - -			26.56			44.7	
	Arm. - - - - -			26.36 ₂			45.2 ₂	
	R. C. ₂ - - - - -			26.49			43.8	
	Q. - - - - -			26.57			43.2 ₂	
	Main 65 - - - - -			- - -			44.8	
	Main 70 - - - - -			26.29			44.1	
4497	Ad. - - - - -			26.48			44.2	
	Arg. 136 (250 stars) - - - - -	13	21	43.48	63	54	12.2	
	Ay. 72 - - - - -			43.41			13.3	
4510	Ad. - - - - -			43.47			12.5	
	St. - - - - -	13	23	51.74	60	35	29.5	
	Pule. - - - - -			51.68			30.3	
	Ay. 72 - - - - -			51.66			30.6	
4577	Ad. - - - - -			51.70			30.0	Piazz's decl. is probably 10" too far north; it gives 25".0, and Gr. 16".0; but I fear there is some error in the Storia Celeste.
	T. - - - - -	13	37	35.75	65	27	15.6	
	Ay. 40 - - - - -			36.12			15.8	
	Arm. - - - - -			36.10			17.2	
	H. 44 - - - - -			36.28			15.3	
	R. C. - - - - -			36.11			16.4	
	Lang. - - - - -			- - -			15.6	
	R. C. ₂ - - - - -			36.41			14.8	
4646	Ay. 72 - - - - -			36.26			15.7	Ay. 72 has double weight as well as Pule.
	Ad. - - - - -			36.21			15.8	
	St. - - - - -	13	47	46.98	65	20	28.1	
	Yarn. - - - - -			47.02			28.0	
	Pule. - - - - -			46.91			28.3	
4689	Ay. 72 - - - - -			46.94			28.5	
	Ad. - - - - -			46.96			28.2	
	Arm. - - - - -	13	59	5.70	69	16	51.6	
	H. - - - - -			5.48			50.4	
	R. C. - - - - -			5.63			51.6	
	Ay. 45 - - - - -			- - -			50.5	
	Ay. 50 - - - - -			5.89			50.0 ₀	
	Ay. 60 - - - - -			- - -			50.9 ₂	
	Q. - - - - -			5.70			49.8	
	Ay. 64 - - - - -			5.47			51.5	
4696	Ay. 71 - - - - -			5.42 ₁			51.5	
	Ad. - - - - -			5.63			50.8	
	St. - - - - -	14	1	0.35	64	58	25.5	
	Lang. - - - - -			- - -			25.6	
	Yarn. - - - - -			0.39			25.1	
	Sm. - - - - -			- - -			24.9	
	Wn. 67 - - - - -			0.42			25.0	
	Leid. - - - - -			- - -			25.2	
	Main - - - - -			0.32			25.2	
	Ay. - - - - -			0.32			25.6	
4817	Pule. - - - - -			- - -			25.8	The adopted P. M. is from Arg. LII (Bd. VII, p. 130); the amount is a trifle uncertain in A. R., but sure in decl.
	Ad. - - - - -			0.36			25.5	
	R. C. - - - - -	14	27	48.25	63	54	19.3	
	H. - - - - -			48.28			19.7	
	Ay. 45, 50 - - - - -			48.12			18.0	
	Jac. - - - - -			[47.52]			20.0	
	Bonn. - - - - -			47.89 ₁			19.4 ₁	
	Q. - - - - -			48.05 ₂			18.8 ₂	
	Pule. - - - - -			48.07			19.8	
4834	Ay. 72 - - - - -			48.01 ₂			19.9	P. M. from Fed. and Gr., which agree well.
	Ad. - - - - -			48.13			19.3	
	R. C. - - - - -	14	30	58.28	65	56	29.9	
	Ja. - - - - -			[57.53]			30.1	
	Ay. 60 - - - - -			58.01			30.5	
	LeV. - - - - -			- - -			30.0	
	Q. - - - - -			58.21 ₂			30.6 ₂	
	Ay. 72 - - - - -			58.13			30.7	
	Ad. - - - - -			58.15			30.3	

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
4874	P. M. - - - - -	14 38 56.24	61 47 43.7	Compared with Fed. — $0^{\circ}.73 + 2''.4$ Gr. + $0^{\circ}.35 - 0''.9$
	H. - - - - -	56.64	43.7	
	R. C. - - - - -	56.41	42.6	
	Ja. - - - - -	[55.40]	[40.2]	
	Q. - - - - -	56.37	42.0 ₂	
	Pule. 60 - - - - -	[55.65 ₁]	43.7	
	Ay. 71 - - - - -	56.25 ₁	42.8	
	Ay. 73 - - - - -	56.18	43.2	
	Ad. - - - - -	56.35	43.2	
4949	St. - - - - -	14 55 36.30	66 25 51.4	
	Pule. - - - - -	36.09	50.7	
	Ay. 73 - - - - -	35.88 ₁	50.7	
	Ad. - - - - -	36.16	50.7	
4967	R. C. - - - - -	14 58 31.58	60 41 46.9	For the discussion of proper motion see Arg. (Bd. VII, star LIV).
	Bonn. - - - - -	31.54	45.9	
	Ja. - - - - -	[30.64]	44.8	
	Altona - - - - -	31.30 ₁	43.6 ₁	
	Q. - - - - -	31.72 ₂	46.6 ₁	
	Bonn. - - - - -	31.33 ₂	47.2 ₂	
	Pule. 58 - - - - -	31.52	46.4	
	Ad. - - - - -	31.52	45.9	
4989	R. C. - - - - -	15 2 3.95	66 21 18.6	
	Ja. - - - - -	[3.19]	17.0	
	Ay. 60 - - - - -	- - -	19.6 ₂	
	Ay. 64 - - - - -	4.00	19.8	
	Q. - - - - -	3.96 ₁	20.0 ₂	
	Ad. - - - - -	3.97	18.9	
5058	St. - - - - -	15 13 12.65	67 49 18.6	
	Lang. - - - - -	- - -	18.0	
	Pule. - - - - -	12.62	17.8	
	Ay. 72 - - - - -	12.54	18.4	
	Ad. - - - - -	12.62	18.2	
5091	H. - - - - -	15 20 33.75	63 49 16.5	P. M. of $-0''.14$ in decl. is indicated. There are no earlier observations than these. Without P. M. the P. E. of one determination would be $\pm 0''.80$, and the decl. for 1875.0 $19''.4$.
	R. C. - - - - -	33.54	17.4	
	Ja. - - - - -	32.54	16.1	
	Yarn. - - - - -	33.54	16.3	
	Q. - - - - -	33.57	16.4	
	Sm. 59 - - - - -	33.82	17.2	
	Sm. 65-68 - - - - -	33.76	16.5	
	Ad. - - - - -	33.65	16.6	
5115	H. - - - - -	15 25 23.04	61 6 6.7	Winnecke's declination is derived from his paper on the Mars observations of 1862. With adopted P. M. in decl., c.—o.: Fed. = $-1''.6$ (2 obs.); Gr. = $+0''.3$.
	R. C. - - - - -	22.79	8.1	
	Ja. - - - - -	[22.55]	6.7	
	Winnecke 61 - - - - -	- - -	7.5	
	Ay. 72 - - - - -	22.74	7.4	
5116	Ad. - - - - -	22.86	7.3	The old observations, Pi., Gr., Fed., do not agree well in either co-ordinate, but the P. M. in decl. is pretty sure. Taylor is $3''$ or $4''$ in error, and has been rejected.
	H. - - - - -	15 25 27.67	62 42 30.0	
	R. C. - - - - -	27.55	29.8	
	Arm. - - - - -	- - -	30.3 ₁	
	R. C. ₂ - - - - -	27.65	29.0	
	Pule. 61 - - - - -	27.60	30.4	
	Ay. 72 - - - - -	- - -	30.4 ₂	
5147	Ad. - - - - -	27.62	30.1	The proper motion in A. R. is only a rude approximation; that in decl. repre- sents the old observations, as follows: c.—o., Fed. + $4''.2$; L. — $4''.0$; Pi. + $0''.8$; Gr. + $0''.5$.
	T. - - - - -	15 29 11.14	64 37 46.8	
	H. - - - - -	10.95	45.1	
	R. C. - - - - -	11.03	46.4	
	Arm. - - - - -	- - -	45.3	
	Pule. 55 - - - - -	11.08 ₂	44.5 ₂	
	R. C. ₂ - - - - -	10.89	44.6	
	Q. - - - - -	11.01 ₂	45.3 ₁	
	Ay. 71 - - - - -	- - -	45.7 ₂	
	Ad. - - - - -	11.00	45.6	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
5249	St. - - - - -	15	44	46.00	62	59	10.6	
	Lang. - - - - -						10.0	
	Wn. 67 - - - - -			45.85			10.3	
	Pulc. - - - - -			45.90			10.4	
	Wn. 72 - - - - -			45.92			11.0	
	Ay. 72 - - - - -			45.86			11.0	
	Ad. - - - - -			45.92			10.5	
5406	Il. - - - - -	16	5	59.26	68	8	22.7	Weight of Ay.'s declinations $1\frac{1}{2}$ each (save Ay. 50); the same to Laugier. c.—o. in decl.: Fed. + $0''.3$ (2 obs.); L. L. [— $7''.6$]; Gr. — $0''.4$; Pd. $0''.0$.
	Ay. 45 - - - - -			59.08			22.6	
	R. C. - - - - -			59.29			23.3	
	Ay. 50 - - - - -						22.2 ₂	
	Ja. - - - - -			[58.57]			20.9	
	Lang. - - - - -						22.1	
	Pulc. 57 - - - - -			59.23			22.8	
	Ay. 60 - - - - -			59.13			22.5	
	Yarn. - - - - -			59.28 ₂			22.1	
	Ay. 64 - - - - -			59.36 ₂			22.1	
	Ay. 70 - - - - -			59.28			21.9	
	Ay. 73 - - - - -			59.31			22.4	
	Ad. - - - - -			59.24			22.3	
5453	T. - - - - -	16	13	[52.68]	66	41	12.4	The proper motion is determined from Pi. and Gr., which agree. c.—o. in decl.: Pi. $0''.0$; Gr. — $0''.2$.
	R. C. - - - - -			52.31			12.8	
	Arm. - - - - -			52.05			12.9	
	Lang. - - - - -						13.0	
	R. C. ₂ - - - - -			52.09			13.2 ₂	
	Q. - - - - -			51.96			12.6 ₂	
	Ad. - - - - -			52.08			12.9	
5459	Ay. 40 - - - - -	16	15		60	3	30.2	
	H. - - - - -			10.28			29.1	
	Ay. 45 - - - - -			10.24			31.1	
	R. C. - - - - -			10.31			31.2	
	Ja. - - - - -			[9.33]			30.2	
	Ay. 60 - - - - -			10.32			31.0	
	Wn. 72 - - - - -			10.34			30.3	
	Ay. 72 - - - - -			10.38 ₁			31.4 ₁	
	Ad. - - - - -			10.31			30.5	
5509	P. M. - - - - -	16	22	8.18	61	58	52.0	
	R. C. - - - - -			8.13			51.0	
	Ay. 45, 50 - - - - -			8.14				
	Ja. - - - - -			[7.15]			51.5	
	Ay. 64 - - - - -			8.16 ₁			52.1 ₁	
	Ad. - - - - -			8.15			51.6	
5512	St. - - - - -	16	22	18.23	61	47	50.9	
	Lang. - - - - -						50.9	
	Yarn. - - - - -			18.18			50.7	
	R. C. ₂ - - - - -			18.12			50.9	
	Ay. 64 - - - - -			18.13			50.8	
	Main - - - - -			18.14			50.6	
	Wn. 67 - - - - -			18.21			51.1	
	Leid. - - - - -						51.1	
	Main - - - - -						50.8	
	Ay. 70 - - - - -			18.08			50.7	
	Ad. - - - - -			18.17			50.8	
5514	H. - - - - -	16	22	6.32	69	23	54.5	I have neglected a P. M. of — $0''.02$ in decl. as too precarious.
	R. C. - - - - -			6.41			54.6	
	Ja. - - - - -			[5.18]			54.1	
	Pulc. 60 - - - - -			6.37			54.7	
	Ad. - - - - -			6.36			54.5	
5545	St. - - - - -	16	28	14.02	69	2	18.7	
	Lang. - - - - -						18.2	
	Yarn. - - - - -			14.05			18.3	
	Wn. 67 - - - - -			14.20			18.1	
	Main - - - - -			14.11			18.4	
	Ay. 70 - - - - -			14.01			18.2	
	Ad. - - - - -			14.06			18.4	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
5560	T. - - - - -	16	30	[40.16 ₂]	61	5	8.1	The old observations do not agree in decl. Fedorenko has been rejected. c. — o.: Fed. + 7".6; Pi. + 0".2; Gr. — 0".2. The A. R. is quite uncertain.
	H. 43 - - - - -			39.53			7.8	
	R. C. - - - - -			39.80			7.8	
	Arm. - - - - -			[40.52 ₁]			9.0	
	Wn. 72 - - - - -			39.92			7.4	
	Ay. 73 - - - - -						8.5 ₂	
	Ad. - - - - -			39.75			8.1	
5601	R. C. - - - - -	16	35	39.76	63	19	27.6	c. — o.: Fed. — 1".4; Gr. + 1".1.
	Ja. - - - - -			[39.05]			28.3	
	Ay. 71 - - - - -						28.4 ₂	
	Ad. - - - - -			39.76			28.0	
5628	Mädl. - - - - -	16	40	3.34	64	49	33.3	
	Laug. - - - - -						33.6	
	Yaru. - - - - -			3.32 ₂			33.7	
	Ay. 60 - - - - -			3.33			34.8	
	Ay. 64 - - - - -			3.45 ₂			34.4	
	LeV. 64 - - - - -						34.2	
	Ay. 70 - - - - -			3.46			34.4	
	Main - - - - -			3.28 ₂			33.8	
	Ad. - - - - -			3.37			34.2	
5717	Ay. 40 - - - - -	16	52		60	33	46.4	Gr. gives 47".2 in decl., and Fed. 55".6; the latter is probably 10" in error. I have assumed <i>no</i> P. M.
	Ay. 45-50 - - - - -			19.60			46.3	
	R. C. - - - - -			19.70			46.8	
	Ja. - - - - -			[19.05]			46.9	
	Ch. - - - - -						45.9	
	Ay. 64 - - - - -						46.1	
	Ad. - - - - -			19.65			46.4	
5728	Arg. 184 (250 stars), Ad. - - -	16	53	31.50	62	17	56.3	Arg.'s modern authorities are R. C., Q., Bonn.
5734	T. - - - - -	16	55	5.92 ₁	62	33	44.3	c. — o.: Fed. — 1".1; Pi. — 0".8; Gr. + 0".4.
	R. C. - - - - -			6.22			43.1	
	Arm. - - - - -						44.3	
	Q. - - - - -			6.40 ₂			43.1 ₁	
	Ad. - - - - -			6.21			43.8	
5740	Mädl. - - - - -	16	55	20.74	65	19	33.0	
	Ch. - - - - -						33.4 ₂	
	Q. - - - - -			20.73			32.7	
	R. C. - - - - -			20.78			32.9	
	Ay. 60 - - - - -			20.56			33.8	
	Main - - - - -			20.46 ₂			32.6	
	Ay. 73 - - - - -			20.72			33.1	
	Ad. - - - - -			20.67			33.1	
5745	Mädl. - - - - -	16	55	48.67	65	13	45.8	
	R. C. - - - - -			48.70			46.7	
	Q. - - - - -			48.61			45.9	
	Ay. 73 - - - - -			48.48			46.0	
	Ad. - - - - -			48.61			46.2	
5823	St. - - - - -	17	8	25.66	65	52	7.6	
	R. C. - - - - -			25.74 ₂			6.4	
	Main - - - - -			25.83			6.6	
	Ay. 70 - - - - -			25.65			6.7	
	Ad. - - - - -			25.71			7.0	
5840	T. - - - - -	17	11	27.89 ₂	63	1	1.9 ₂	The observations of A. R. do not agree. In decl., c. — o.: Fed. — 4".9; L. L. + 3".0; Pi. — 1".2; Gr. + 0".8.
	Arm. - - - - -			28.42 ₂			2.9	
	H. 43 - - - - -			28.23			1.2	
	R. C. - - - - -			28.19			1.5	
	Ay. 45 - - - - -			28.13			1.6	
	Pulc. 60 - - - - -			28.20			2.4	
	Q. - - - - -			28.38			1.8	
	Wn. 67 - - - - -			28.13			2.7	
	Ay. 73 - - - - -			28.01 ₂			2.9	
	Ad. - - - - -			28.18			2.2	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
5917	H. - - - - -	17	24	4.50	60	9	11.1	
	R. C. - - - - -			4.51			12.0	
	Ja. - - - - -			[4.21]			12.5	
	Sm. 59 - - - - -			4.78			13.9	
	Ay. 60 - - - - -						12.4	
	Sm. 64 - - - - -			4.73			11.7	
	Ay. 72 - - - - -						12.9	
	Ad. - - - - -			4.63			12.4	
5972	St. - - - - -	17	32	27.90	68	12	51.9	
	Pulc. - - - - -			28.02			51.8	
	Ay. 72 - - - - -			27.78 ₂			52.3	
	Main - - - - -			28.12 ₁			51.4	
	Ad. - - - - -			27.95			51.9	
5978	Arg. 191 (250 stars) - - - - -	17	33	42.13	61	58	13.5	
	Ay. 72 - - - - -			42.00			13.5	
	Ad. - - - - -			42.09			13.5	
6006	St. - - - - -	17	37	41.04	68	48	55.3	
	Yarn. - - - - -			41.03			55.7	
	LeV. - - - - -						55.8	
	Wn. 67 - - - - -			41.17			55.5	
	Pulc. - - - - -			41.02			55.5	
	Ay. - - - - -			41.11			55.5	
	Main - - - - -						55.8	
	Ad. - - - - -			41.06			55.5	
6177	Mädl. - - - - -	18	6	2.42	64	12	5.0	P. M. used + 0".04 in decl.
	R. C. - - - - -						9.3	
	Q. - - - - -			2.40			8.4 ₁	
	Ad. - - - - -			2.42			9.0	
6257	Mädl. - - - - -	18	17	42.49	68	41	30.6	
	H. 43 - - - - -			42.80			31.6	
	R. C. - - - - -			42.49			31.4	
	Arm. - - - - -			42.68			32.4 ₃	
	R. C. ₂ - - - - -			42.75 ₁			30.5 ₃	
	Ay. 60 - - - - -			42.70			31.4	
	Q. - - - - -			42.68 ₃			32.6 ₁	
	Ay. 73 - - - - -			42.66 ₂			31.0 ₃	
	Ad. - - - - -			42.64			31.5	
6272	T. - - - - -	18	19	[56.14]	67	22	25.0 ₂	There may be P. M. in A. R., which is uncertain. Pi. gives decl. 26".5, and Lalande 43".1 [— 15"].
	Arm. - - - - -			56.37 ₂			27.8	
	R. C. - - - - -			56.15			27.6	
	Q. - - - - -			56.42				
	Ay. 72 - - - - -			56.34 ₁			26.9 ₁	
	Ad. - - - - -			56.32			27.1	
6316	Mädl. - - - - -	18	25	37.36	65	29	7.9	
	Arm. - - - - -			37.18			11.8	
	H. - - - - -						9.6	
	R. C. - - - - -						9.8	
	R. C. ₂ - - - - -			37.34 ₁			9.2	
	Q. - - - - -			37.58 ₁			9.7 ₁	
	LeV. 64 - - - - -						10.1	
	Ay. 72 - - - - -			37.45			10.6	
	Ay. 73 - - - - -			37.48			10.7	
	Ad. - - - - -			37.39			10.2	
6224	St. - - - - -	18	13	10.57	64	21	17.6	
	Ay. - - - - -						17.8	
	Pulc. - - - - -			10.55			17.9	
	Ad. - - - - -			10.56			17.8	
6243	Mädl. - - - - -	18	16	0.67	68	42	36.0	
	H. 43 - - - - -						37.5	
	R. C. - - - - -						37.4	
	Arm. - - - - -			0.82			[41.6 ₁]	
	Ay. 60 - - - - -			0.75			37.9	
	Ay. 73 - - - - -			0.63			37.5	
	Ad. - - - - -			0.72			37.6	

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
6373	R. C. - - - - -	18 36 53.33	60 35 44.9	c. — o. in decl.: F. — 0".6; Gr. — 0".7.
	Arm. - - - - -	53.22 ₂	44.3 ₂	
	Ja. - - - - -	[52.68]	45.5	
	Ay. 73 - - - - -	53.27 ₁	46.8	
	Ad. - - - - -	53.28	45.5	
6393	H. - - - - -	18 39 50.55	62 37 30.3 ₂	c. — o. in decl.: F. — 0".9 (2 obs.); Gr. + 0".7.
	R. C. - - - - -	50.57	31.6	
	Ja. - - - - -	[50.11]	32.6	
	Pulc. 61 - - - - -	50.59	31.8	
	Wn. 71 - - - - -	50.60	30.9	
	Wn. 72 - - - - -	50.71 ₂	31.7	
	Ay. 72 - - - - -	50.56 ₁	32.6 ₁	
	Ad. - - - - -	50.60	31.6	
6410	Mäd1. - - - - -	18 42 49.90	60 54 56.3	
	Ja. - - - - -	[49.47]	57.5	
	Wn. 71 - - - - -	49.90 ₂	57.2 ₂	
	Wn. 72 - - - - -	49.92	57.3	
	Ay. 72 - - - - -	49.81 ₂	57.3	
	Ad. - - - - -	49.88	57.3	
6508	Arm. - - - - -	18 56 1.87	62 13 41.2	c. — o. in decl.: F. — 2".7; Gr. + 0".5; Struve + 0".6. There are traces of a P. M. in A. R.; perhaps = + 0".006. It has not been used.
	R. C. - - - - -	1.83	40.1	
	Ja. - - - - -	[1.46]	40.4	
	Ay. 64 - - - - -	1.75	40.0	
	Ay. 70 - - - - -	1.89	39.7	
	Ay. 73 - - - - -	1.84	39.7	
	Ad. - - - - -	1.86	40.1	
6555	R. C. - - - - -	19 2 6.78	61 54 25.4	c. — o. in decl.: F. — 4".0; Gr. + 1".1. The P. M. in A. R. (not used) may be + 0".006.
	Ja. - - - - -	[6.67]	24.5	
	Ay. 73 - - - - -	6.85	24.0	
	Ad. - - - - -	6.82	24.6	
6586	Mäd1. - - - - -	19 9 17.44	65 46 9.6	c. — o. in decl.: Br. — 1".8; Pi. — 0".1; Gr. + 0".2.
	Arm. - - - - -	17.55	11.2	
	Ay. 60 - - - - -	.	9.8 ₂	
	Ay. 64 - - - - -	17.59	10.5	
	Wn. 67 - - - - -	17.64	9.6	
	Ay. 71 - - - - -	17.41	9.8	
	Ay. 73 - - - - -	17.59	9.9	
	Ad. - - - - -	17.54	10.1	
6612	St. - - - - -	19 12 31.25	67 26 [29.1]	Owing to the considerable correction to Mädler's P. M., I have brought up the decl. of Pulc. and Ay. 60 (64), from which St. is made up.
	Pulc. - - - - -	.	30.7	
	Lang. - - - - -	.	29.8	
	Ay. 60 - - - - -	.	29.9	
	Ay. 64 - - - - -	.	30.0	
	Yarn. - - - - -	31.30	30.8	
	Leid. - - - - -	.	29.8	
	Wn. 67 - - - - -	31.38	29.8	
	Ay. 70 - - - - -	31.32	30.5	
	Main - - - - -	31.16	29.6	
	Ad. - - - - -	31.28	30.1	
6629	St. - - - - -	19 15 39.66	62 58 51.0	With no P. M. in decl. we find, c. — o.: F. + 1".7; Pi. — 2".5; Gr. + 0".5. The P. M. in A. R. agrees well with all three authorities.
	T. - - - - -	39.39	51.6	
	R. C. - - - - -	39.71	50.4	
	Q. - - - - -	39.53 ₂	50.2 ₁	
	Ad. - - - - -	39.57	50.9	
6662	Mäd1. - - - - -	19 20 1.23	65 28 25.5	Airy's declinations (and A. R. of 1860) have received double weight.
	Arm. - - - - -	[1.01]	26.5	
	Ay. 60 - - - - -	1.34	26.4	
	Ay. 64 - - - - -	1.28	26.0	
	Ay. 69 - - - - -	1.33	26.4	
	Ay. 72 - - - - -	1.33	26.2	
	Ad. - - - - -	1.31	26.3	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>c.</i>	<i>'</i>	<i>"</i>	
6735	R. C. - - - - -	19	32	35.81	69	26	55.9	In computing the proper motion of this star I have allowed for its secular change. Weights in declination, 12 yr., 6 yr., Ay. 60, 1½; Ay. 64, 70, 2.
	Ay. 12-yr. - - - - -			36.00			56.2	
	Ay. 6-yr. - - - - -						54.3	
	R. C. ₂ - - - - -			35.74			54.8	
	Yarn. - - - - -			36.05 ₂			53.6 ₂	
	Ay. 60 - - - - -			35.94			54.6	
	Ay. 64 - - - - -			35.90			54.3	
	Ay. 70 - - - - -			35.88			54.1	
6737	Ad. - - - - -			35.92			54.6	
	R. C. - - - - -	19	33	26.41	63	9	23.8	
	Ja. - - - - -			[25.81]			22.7	
6808	Ad. - - - - -			26.41			23.2	
	R. C. - - - - -	19	44	28.35	69	1	53.6	C. — o. in decl.: F. — 1".0 (2 obs.); Gr. + 0".7.
	Ja. - - - - -			[28.15]			54.0	
	Ay. 64 - - - - -			28.56			53.4	
	Ay. 68 - - - - -						52.4	
	Ay. 69 - - - - -						52.9	
	Ay. 71 - - - - -			28.52 ₂			53.1	
	Yarn. 72 - - - - -						54.1	
	Ay. 73 - - - - -			28.35 ₂			53.2	
6834	Ad. - - - - -			28.44			53.3	
	R. C. - - - - -	19	48	26.43	60	53	17.0 ₂	
	Ja. - - - - -			[26.02]			16.9	
	Arm. - - - - -			26.51 ₂			17.4	
	Ay. 71 - - - - -						16.2	
	Ay. 72 - - - - -			26.34 ₁			15.1	
	Ad. - - - - -			26.43			16.4	
6836	St. - - - - -	19	48	35.19	69	56	[57.4]	St. is replaced by Pulc. and Ay. 60, owing to the change in Mädler's P. M.
	Pulc. - - - - -						58.5	
	Ay. 60 - - - - -						58.2	
	Ay. 64 - - - - -			35.14			58.1	
	Wn. 67 - - - - -			35.28			58.4	
	Ay. 70 - - - - -			35.22			58.4	
	Main - - - - -			35.05			58.0	
	Ad. - - - - -			35.18			58.2	
6861	R. C. - - - - -	19	52	41.11	60	29	34.1	C. — o. in decl.: Fed. — 0".6; Gr. + 1".0.
	Ja. - - - - -			[40.73]			33.4	
	Yarn. - - - - -			41.07			32.7	
	Ay. 72 - - - - -			41.01 ₂			33.1	
	Ad. - - - - -			41.07			33.3	
6862	R. C. - - - - -	19	52	45.08	60	17	1.0	C. — o. in decl.: Fed. + 0".1; Gr. — 0".9. The A. R. should be increased by the P. M. since 1855, but its amount is uncertain.
	Ja. - - - - -			[44.89]		16	59.4	
	Ay. 71 - - - - -			45.20 ₁		17	0.0 ₁	
	Ad. - - - - -			45.12		17	0.2	
6869	Mädl. - - - - -	19	53	[33.64]	64	23	17.6	
	R. C. - - - - -			33.77			19.6	
	Arm. - - - - -			34.07			19.4	
	Yarn. - - - - -			33.92 ₂			19.5 ₂	
	Q. - - - - -			34.14 ₂			19.1 ₂	
	Ad. - - - - -			33.96			19.4	
6905	Mädl. - - - - -	20	0	8.84	64	28	14.9	Weight 1½ assigned to Ay. 64 and Ay. 70.
	Arm. - - - - -			8.88			16.0	
	R. C. - - - - -						16.2	
	H. 43 - - - - -						16.3	
	Ay. 64 - - - - -			8.83 ₂			15.9	
	Ay. 70 - - - - -			8.82 ₁			15.5	
	Main - - - - -			8.75 ₁			15.2 ₂	
	Ad. - - - - -			8.83			15.9	
6913	Mädl. - - - - -	20	0	56.59	64	16	52.0	Ay. 50 has weight = 1½ in decl. Auwers's corr. is — 4".4; hence Mädler is largely in error. A. R. uncertain.
	T. - - - - -						53.6	
	Arm. - - - - -			56.75			56.7	
	R. C. - - - - -						55.2	
	Ay. 50 - - - - -			56.83			53.8	
	Pulc. - - - - -			56.44			54.3	
	Ad. - - - - -			56.65			54.6	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
6926	Mädl. - - - - -	20	2	14.94	67	30	1.8	Mädler's P. M. in decl. has the wrong sign by a misprint. Weights in decl.: Ay. 60, 2; Ay. 70, Main, 1½.
	Ay. 60 - - - - -			14.92			1.8	
	Ay. 64 - - - - -			14.96			1.8	
	Ay. 70 - - - - -			14.91			1.6	
	Main - - - - -			14.73 ₂			1.8	
	Ad. - - - - -			14.91			1.8	
6930	P. M. - - - - -	20	3	9.96	63	31	52.1	c.—o. in decl.: F.—0".6; Gr.+0".3. P. M. in A. R. insensible.
	R. C. - - - - -			10.12			51.7	
	Arm. - - - - -			10.13			51.3 ₂	
	Ja. - - - - -			[10.00]			53.0	
	Ad. - - - - -			10.07			52.0	
6932	Mädl. - - - - -	20	3	33.34	61	37	57.5	The P. M. is very exactly confirmed by Bessel 1820.
	Arm. - - - - -			33.16			58.8 ₂	
	Ch. - - - - -						58.1	
	Yarn. - - - - -			33.42 ₂			58.8	
	R. C. ₂ - - - - -						57.4	
	Ay. 60 - - - - -			33.53			58.1	
	Ay. 73 - - - - -			33.30 ₁			58.9 ₁	
	Ad. - - - - -			33.35			58.3	
6939	Mädl. - - - - -	20	4	20.89	67	40	5.4	I do not understand Mädler's calculation, and have assumed no P. M. in decl., which gives c.—o.: Gr.—0".5; F.+4".7 (1 obs.); Auwers Br.—5".2 (1 obs.). The P. M. would be about —0".04, and decl. for 1875.0 2".6, if there is no mistake in Bradley's declination.
	R. C. - - - - -			20.92			4.2	
	Arm. - - - - -			21.08			3.3	
	Ad. - - - - -			20.96			3.8	
6970	Mädl. - - - - -	20	9	31.94	61	42	0.5	
	Arm. - - - - -			32.12			0.8	
	R. C. ₂ - - - - -			31.85			0.7	
	Ay. 71 - - - - -			31.64 ₁			1.5	
	Ay. 73 - - - - -			31.87			0.8	
	Ad. - - - - -			31.91			1.0	
6980	Mädl. - - - - -	20	11	9.76	60	15	29.6	Br. has but one observation in decl. c.—o. in decl.: Br. 0".0; Pi.—1".4; Gr.+0".5.
	R. C. - - - - -						30.6	
	Arm. - - - - -						31.6	
	R. C. ₂ - - - - -			9.66			30.1	
	Q. - - - - -			9.78 ₂			31.2	
	Ay. 72 - - - - -			9.59 ₁			31.5 ₁	
	Ad. - - - - -			9.71			30.9	
6994	Mädl. - - - - -	20	12	[40.27]	64	22	51.4	Br. has but one observation. I have assumed no P. M. in decl., which gives c.—o.: Br.—0".6; Pi.+2".0; Gr.+1".7. The least square solution alters the result very little.
	R. C. - - - - -			40.48			50.8	
	Arm. - - - - -			40.45			51.4	
	R. C. ₂ - - - - -			40.66			50.1	
	Ay. 64 - - - - -			40.54			51.3	
	Ad. - - - - -			40.53			50.9	
7024	Mädl. - - - - -	20	17	31.28	61	51	37.2	
	Ay. 40 - - - - -						38.2	
	Arm. - - - - -			31.44			37.6	
	Ay. 45 - - - - -						38.3	
	R. C. - - - - -						37.4	
	Yarn. - - - - -			31.31 ₂			37.7	
	Ad. - - - - -			31.35			38.0	
7037	Mädl. - - - - -	20	19	[32.74]	68	28	48.9	Ay.'s declinations have a weight 1½. I have rejected Mädler's P. M. in A. R. Br. has no A. R., and Gr. is probably 1" in error. Gr. and P. M. agree well in decl.
	H. 44 - - - - -			32.23			50.2	
	R. C. - - - - -			32.16			50.1	
	Arm. - - - - -			32.31			51.6	
	Ja. - - - - -			[31.78]			50.0	
	Ay. 71 - - - - -			32.16 ₁			48.9	
	Ay. 73 - - - - -			32.26			49.4	
	Ad. - - - - -			32.23			49.9	
7051	T. - - - - -	20	21	[22.74]	61	51	43.5	P. M. in decl. used, +0".10. c.—o.: F.—4".4; Pi.+1".5.
	R. C. - - - - -			23.28 ₂			44.6	
	R. C. ₂ - - - - -			23.42			43.8	
	Ad. - - - - -			23.36			44.0	

No.	Authority.	Right ascension.			Declination.		Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>"</i>	
7090	Mädl. - - - - -	20	26	36.56	68	21	Fed. is 10'' too far south.
	Arm. - - - - -			36.67		4.0	
	Ay. 50 - - - - -			36.71		2.7	
	R. C. ₂ - - - - -			36.81		2.4	
	Ad. - - - - -			36.69		3.0	
7098	St. - - - - -	20	27	28.84	62	34	
	Ay. 64 - - - - -			28.85		27.3	
	Ay. 70 - - - - -			28.80		27.6	
	Main - - - - -			28.83		27.2	
	Ad. - - - - -			28.84		27.5	
7176	R. C. - - - - -	29	37	38.42	60	3	The P. M. in A. R. is inconsiderable. c. — o. in decl.: F. + 0''.5; Gr. + 0''.5.
	Arm. - - - - -			38.55		13.0	
	Ja. - - - - -			[38.15]		13.4	
	Q. - - - - -			38.32 ₁		13.3	
	Wn. 67 - - - - -			38.00		12.7	
	Ad. - - - - -			38.49		13.0	
7193	R. C. - - - - -	20	39	59.58	60	9	I have used no P. M. Fed. gives 5''.7 (1 obs.) and Gr. gives 7''.5 in declination.
	Ja. - - - - -			[59.10]		6.5	
	Yarn. - - - - -			59.58 ₂		6.2	
	Ay. 71 - - - - -			59.56 ₁		4.2	
	Ad. - - - - -			59.58		5.7	
7211	Mädl. - - - - -	20	41	36.85	66	12	Auwers has corrected Bessel by — 2''.9 in decl., which accounts for the varia- tion from Mädler.
	H. 43 - - - - -			.		9.9	
	R. C. - - - - -			.		12.6	
	Arm. - - - - -			36.96		12.0	
	Ay. 50 - - - - -			37.09		11.1	
	Pulc. 61 - - - - -			36.92		11.0	
	Yarn. 72 - - - - -			.		12.1	
	Ad. - - - - -			36.97		11.5	
7220	St. - - - - -	20	42	44.69	61	21	Weight 2 to Ay. 64, and the decl. of Ay. 70, 1 $\frac{1}{2}$, to the decl. of Main and Smyth.
	R. C. ₂ - - - - -			44.65		13.2	
	Yarn. - - - - -			44.68 ₂		14.2	
	Q. - - - - -			44.72		11.8	
	Ay. 64 - - - - -			44.65		13.4	
	Sm. - - - - -			[44.99]		13.0	
	Main - - - - -			44.63		12.7	
	Ay. 70 - - - - -			44.58		13.1	
	Ad. - - - - -			44.66		13.1	
7416	St. - - - - -	21	15	35.70	62	3	The observations are very numerous, but do not agree quite as well as would be expected.
	Lang. - - - - -			.		22.2	
	Yarn. - - - - -			35.68		22.6	
	R. C. ₂ - - - - -			35.75		22.4	
	Ay. 64 - - - - -			35.56		22.4	
	Wn. 67 - - - - -			35.75		22.4	
	Leid. - - - - -			.		23.2	
	Main - - - - -			35.72		22.8	
	Main - - - - -			.		22.7	
	Ay. 70 - - - - -			35.63		22.8	
	Pulc. - - - - -			.		23.3	
	Ad. - - - - -			35.68		22.6	
7428	Mädl. - - - - -	21	16	46.38	64	20	
	H. 41 - - - - -			.		31.7	
	R. C. - - - - -			.		33.0	
	Arm. - - - - -			46.49 ₁		33.3	
	Ay. 60 - - - - -			46.32		31.8	
	Ay. 73 - - - - -			46.50 ₁		33.8 ₁	
	Ad. - - - - -			46.40		32.6	
7430	Il. 44 - - - - -	21	17	20.98	60	13	
	R. C. - - - - -			20.91		33.9	
	Ja. - - - - -			[20.60]		34.8	
	Sm. 59 - - - - -			21.05		34.5	
	Sm. 63. 68 - - - - -			21.01		34.2 ₂	
	Wn. 71 - - - - -			.		.	
	Wn. 72 - - - - -			20.99		32.1	
	Ad. - - - - -			20.99		33.7	

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
7449	T. - - - - -	21 19 [47.47]	63 41 26.3	The adopted P. M. represents Piazzzi's declination to $+0''.6$, and his A. R. closely.
	H. 43 - - - - -	48.31	23.6	
	Arm. - - - - -	48.07 ₁	25.8	
	R. C. - - - - -	48.08	25.6	
	Ay. 64 - - - - -	48.11	25.0	
	Ay. 73 - - - - -	-	24.4	
	Ad. - - - - -	48.15	25.0	
7482	Müdl. - - - - -	21 25 21.02	66 15 47.8	Airy's position (10 obs. in all) has had double weight.
	Arm. - - - - -	21.05	51.1	
	R. C. - - - - -	-	49.0	
	Ay. 60, 64, 73 - - - - -	21.09	50.8	
	Ad. - - - - -	21.06	50.4	
7493	St. - - - - -	21 27 2.37	70 0 43.5	c. — o. for Pi. — $0''.1$; for Gr. $+0''.5$.
	Lang. - - - - -	-	43.2	
	Yarn. - - - - -	2.35	43.1	
	Ay. 64 - - - - -	2.37	43.5	
	Wn. 67 - - - - -	2.45	43.5	
	Leid. - - - - -	-	43.5	
	Main - - - - -	2.43	43.8	
	Main - - - - -	-	43.2	
	Ay. 70 - - - - -	2.33	43.6	
	Pulc. - - - - -	-	44.3	
	Ad. - - - - -	2.32	43.5	
7533	T. - - - - -	21 33 50.89	61 44 18.4	
	Arm. - - - - -	50.96	17.2	
	H. - - - - -	50.94	16.1	
	R. C. - - - - -	50.87	16.7	
	R. C. ₂ - - - - -	51.03	15.4	
	Q. - - - - -	51.06 ₂	17.6 ₂	
	Ay. 64 - - - - -	50.91	16.6	
	Wn. 67 - - - - -	50.84	16.7	
	Ad. - - - - -	50.93	16.8	
7542	Müdl. - - - - -	21 34 33.90	61 31 6.7	
	Arm. - - - - -	34.03	6.6	
	Yarn. - - - - -	33.98	7.2	
	Ay. 60 - - - - -	34.00	6.8	
	Ay. 72 - - - - -	34.07 ₁	6.7	
	Ad. - - - - -	33.99	6.8	
7595	Müdl. - - - - -	21 41 [50.83]	60 32 39.4	Ay.'s declinations receive double weight.
	Arm. - - - - -	[50.78]	40.5	
	Ay. 60 - - - - -	50.61	39.8	
	LeV. - - - - -	-	39.5	
	Ay. 64 - - - - -	50.58	39.3	
	Ay. 70 - - - - -	50.58	40.0	
	Ad. - - - - -	50.59	39.8	
7605	Müdl. - - - - -	21 43 44.09	60 6 46.6	
	Arm. - - - - -	44.04	45.9	
	H. - - - - -	-	46.3	
	R. C. - - - - -	-	46.6	
	Ay. 64 - - - - -	44.02	47.0	
	Ad. - - - - -	44.05	46.5	
7610	Ay. 40-45 - - - - -	21 44 48.54	69 34 17.4 ₂	With P. M. — $0''.05$ in decl. the representation is, c. — o.: F. $+1''.4$ (3 obs.); Gr. — $0''.5$; Pd. — $0''.3$. The evidence of P. M. in A. R. is contradictory.
	R. C. - - - - -	48.38	16.9	
	Ay. 50 - - - - -	48.59 ₁	15.7 ₁	
	Ja. - - - - -	[48.24]	17.2 ₂	
	Lang. - - - - -	-	16.0	
	Yarn. - - - - -	48.62	16.6 ₂	
	Ay. 60 - - - - -	48.64	16.2 ₂	
	Ay. 64 - - - - -	48.52	17.1	
	Ay. 72 - - - - -	48.58	16.7	
	Ad. - - - - -	48.55	16.5	
7611	R. C. - - - - -	21 45 5.99	64 35 20.1	c. — o. in decl.: F. — $0''.7$; G. $+0''.2$. P. M. assumed zero.
	Ja. - - - - -	[5.73]	19.8	
	Q. - - - - -	6.14	19.6	
	Wn. 67 - - - - -	6.23	19.6	
	Ay. 72 - - - - -	5.82 ₁	20.1 ₁	
	Ad. - - - - -	6.08	19.8	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
7760	H. 44 - - - - -	22	7	47.46	69	30	54.8	c. — o. in decl.: F. = $-0''.8$; Gr. = $+0''.2$; Pd. = $+0''.4$.
	R. C. - - - - -			47.43			55.0	
	Ja. - - - - -			[47.02]			56.6	
	R. C. ₂ - - - - -			47.18 ₂			54.0	
	Q. - - - - -			47.37 ₁			54.5 ₂	
	Main 70 - - - - -			47.36			55.8	
	Main 72 - - - - -			47.64 ₂			54.7	
	Ay. 73 - - - - -			47.32 ₂			55.5 ₂	
	Ad. - - - - -			47.39			55.1	
7766	T. - - - - -	22	8	28.74 ₂	62	40	23.9 ₂	
	H. - - - - -			28.56 ₁			23.5	
	R. C. - - - - -			28.42			24.2	
	Wn. 67 - - - - -			28.97 ₁			23.5 ₁	
	Ay. 73 - - - - -			28.88 ₁			23.9 ₁	
	Ad. - - - - -			28.67			23.8	
7775	Müdl. - - - - -	22	9	[53.50]	62	32	32.3	Mädler's A. R. and P. M. in A. R. have been omitted.
	Arm. - - - - -			53.92			34.0	
	R. C. - - - - -			53.79			33.0	
	Yarn. - - - - -			53.95 ₂			32.2 ₂	
	Q. - - - - -			54.07 ₂			33.4 ₂	
	Ay. 64 - - - - -			53.79			32.2	
	Ad. - - - - -			53.89			33.0	
7786	R. C. - - - - -	22	13	31.76	65	30	13.6	
	Arm. - - - - -			[30.78 ₁]			13.8	
	Ja. - - - - -			[30.89]			12.6	
	Ay. 50 - - - - -			31.71			12.8	
	Q. - - - - -			31.80			13.8 ₂	
	Ay. 72 - - - - -			.			12.7	
	Ad. - - - - -			31.76			13.2	
7789	Müdl. - - - - -	22	14	7.96	62	10	40.5	c. — o. in decl.: Br. $-2''.0$ (1 obs.); F. $-3''.2$ (1 obs.); P. $+1''.9$ (14 obs.); Gr. $-0''.8$.
	Ay. 40 - - - - -			7.92 ₂			41.3	
	H. 43 - - - - -			7.94			40.4	
	Ay. 45 - - - - -			8.25			41.3	
	R. C. - - - - -			7.88			40.5	
	Arm. - - - - -			8.05			41.6	
	Pnle. 58 - - - - -			7.95			41.2	
	Ay. 73 - - - - -			8.21 ₁			41.7 ₁	
	Ad. - - - - -			8.02			41.1	
7810	R. C. - - - - -	22	18	2.03	66	4	31.4	c. — o. in decl.: F. $+0''.3$ (2 obs.); G. $+0''.1$; P. M. $-0''.4$.
	Ay. 50 - - - - -			2.13			31.0	
	Ja. - - - - -			[1.42]			30.8	
	Q. - - - - -			2.04 ₂			30.4 ₂	
	Main - - - - -			1.80			31.4	
	Ay. 72 - - - - -			2.08 ₂			31.2	
	Yarn. 72 - - - - -			.			30.0	
	Ad. - - - - -			2.01			30.9	
7829	T. - - - - -	22	21	35.85 ₂	62	41	33.0	c. — o.: Pi. $0''.0$; Gr. $-0''.5$.
	R. C. - - - - -			35.83			34.6	
	Yarn. - - - - -			35.88 ₂			34.8 ₂	
	Ay. 70 - - - - -			.			30.9 ₂	
	Ad. - - - - -			35.85			33.4	
7837	Müdl. - - - - -	22	23	4.03	64	29	41.8	Weight of Ay. 60 in A. R., $1\frac{1}{2}$; in decl., 2.
	Arm. - - - - -			4.26			42.8	
	Ay. 60 - - - - -			4.07			42.7	
	Q. - - - - -			4.24			42.3 ₂	
	Yarn. - - - - -			.			40.6 ₁	
	Ad. - - - - -			4.14			42.4	
7875	R. C. - - - - -	22	29	24.02	61	7	57.9	c. — o. in decl.: Fed. $-0''.7$; Gr. $+2''.0$. Position uncertain. With P. M. $+0''.04$ the decl. would be $58''.9$.
	Arm. - - - - -			23.99 ₁			57.6	
	Ad. - - - - -			24.01			57.8	
7876	Arg. 230 - - - - -	22	29	25.50	69	16	0.7	
	H. 44 - - - - -			25.58			0.4	
	Wn. 67 - - - - -			25.51	15		59.8	
	Ad. - - - - -			25.52	16		0.5	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
7878	Pd. - - - - -	22	29	44.91	69	43	42.6	c. — o.: F. — 0".1 (2 obs.); G. + 0".2.
	P. M. - - - - -			44.78			42.2	
	R. C. - - - - -			44.93			42.0	
	Ja. - - - - -			[44.71]			43.4	
	R. C. ₂ - - - - -			45.08 ₂			41.8	
	Q. - - - - -			45.13 ₁			42.5 ₂	
	Ad. - - - - -			44.96			42.4	
7902	St. - - - - -	22	34	13.21	62	56	5.6	
	Yarn. - - - - -			13.02 ₂			5.9	
	Pule. - - - - -			13.13			5.9	
	Ay. 72 - - - - -			.			5.6	
	Ad. - - - - -			13.15			5.7	
7963	P. M. - - - - -	22	44	45.61	67	54	28.5	Gr. gives 45°.34 in A. R. without S. C., and 26".9 in decl. with it. P. M. used + 0".020 + 0".10. The central point between the two stars is observed.
	R. C. - - - - -			45.66			28.2	
	Ja. - - - - -			[45.18]			27.5	
	Main - - - - -			45.57 ₂			27.3	
	Ad. - - - - -			45.62			27.8	
7967	St. - - - - -	22	45	14.02	65	32	34.8	Weights in decl.: St., 4; Lang., 2; Main, 2; Wn. 67, 1½.
	Lang. - - - - -			.			34.5	
	R. C. ₂ - - - - -			13.93			35.4	
	Yarn. - - - - -			14.17			35.0	
	Main - - - - -			14.08			35.3	
	Wn. 67 - - - - -			14.11			35.6	
	Ay. 70 - - - - -			.			35.4	
7973	Ad. - - - - -			14.05			35.0	Mädler's P. M. in A. R. is probably too large.
	Mädl. - - - - -	22	46	30.22	61	1	57.2	
	R. C. - - - - -			30.21			55.4	
	Arm. - - - - -			30.13			56.7	
	Ay. 60 - - - - -			30.15			56.7	
	Q. - - - - -			30.21 ₁			56.5 ₂	
	Main - - - - -			29.98			56.8	
	Ay. 72 - - - - -			30.09			56.7	
8039	Ad. - - - - -			30.14			56.5	c. — o. in decl.; Br. — 0".7 (1 obs.); Gr. + 1".1. The A. R. is uncertain.
	Mädl. - - - - -	22	58	[47.99]	66	32	8.8	
	Arm. - - - - -			[47.84 ₁]			8.8	
	Ay. 60 - - - - -			47.60			8.3	
	Q. - - - - -			47.66 ₁			6.9 ₂	
	Ay. 64 - - - - -			47.76 ₂			8.2 ₂	
	Ay. 72 - - - - -			47.73 ₁			7.7	
	Ad. - - - - -			47.68			8.1	
8068	R. C. - - - - -	23	2	53.05	63	32	47.5	
	Ja. - - - - -			[52.92]			47.9	
	Ad. - - - - -			53.05			47.7	
8077	R. C. - - - - -	23	4	59.70	66	33	48.6	c. — o. in decl.: F. + 0".8 (1 obs.); Gr. + 0".1.
	Ja. - - - - -			[59.44]			48.7	
	Lang. - - - - -			.			48.6	
	Ay. 64 - - - - -			59.71			48.9	
	Ay. 72 - - - - -			59.76			49.7	
	Ad. - - - - -			59.72			48.9	
8124	Mädl. - - - - -	23	13	30.06	67	25	40.5	
	Ay. 60 - - - - -			.			39.9	
	Yarn. - - - - -			30.05 ₂			40.8	
	Q. - - - - -			30.07			39.7 ₂	
	Ay. 64 - - - - -			29.94			39.6	
	Wn. 67 - - - - -			.			39.9	
	Main - - - - -			29.72 ₁			40.3	
	Ay. 70 - - - - -			29.96			39.5	
8137	Ad. - - - - -			29.98			39.9	c. — o.: Auwers — 2".8 (1 obs.); Bessel 1815 + 1".7 (3 obs.) Mädler gives 46°.39 and 4".6, and is much in error.
	R. C. - - - - -	23	14	47.01 ₂	61	17	11.0 ₂	
	Arm. - - - - -			47.14 ₁			12.2	
	Sm. - - - - -			47.47			10.6	
	Ad. - - - - -			47.24			11.3	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
8138	Müdl. - - - - -	23	15	7.27	61	31	45.1	c.—o. in decl.: Auwers + 0".6 (1 obs.); Bess. 1815 — 0".8 (6 obs.).
	Arm. - - - - -			7.63 ₁			43.4	
	Bonn. - - - - -			7.60 ₂			44.8 ₁	
	Sm. - - - - -						42.8	
	Ad. - - - - -			7.46			43.5	
8162	St. - - - - -	23	19	17.53	61	35	48.2	
	Yarn. - - - - -						48.6 ₂	
	Pulc. - - - - -			17.51			47.6	
	Ay. 73 - - - - -			17.53 ₂			47.9	
	Ad. - - - - -			17.52			48.0	
8173	Müdl. - - - - -	23	21	0.78	69	59	48.0	In declination I have used no P. M. c.—o.: Auwers — 2".2 (1 obs.); Gr. + 1".8; F.— 1".9 (2 obs.).
	Arm. - - - - -			1.02			49.9	
	R. C. - - - - -						48.9	
	Ja. - - - - -			[0.49]			48.8	
	Lang. - - - - -						48.5	
	Yarn. - - - - -			0.99 ₂			49.9 ₂	
	Q. - - - - -			0.96			48.9 ₂	
	Ay. 70 - - - - -			0.92			50.2	
	Ad. - - - - -			0.93			49.3	
8180	Müdl. - - - - -	23	22	0.18	69	40	19.8	
	Arm. - - - - -			0.44 ₂			20.6	
	Ay. 60 - - - - -			0.31			20.0	
	Q. - - - - -			0.32			19.3	
	Ay. 64 - - - - -			0.31			19.7	
	LeV. 64 - - - - -						19.4	
	Ay. 70 - - - - -			0.16			19.3	
	Ay. 73 - - - - -			0.11 ₁			19.6	
	Ad. - - - - -			0.27			19.6	
8273	St. - - - - -	23	41	56.61	67	6	44.4	
	Lang. - - - - -						43.6	
	LeV. 64 - - - - -						43.8	
	Pulc. - - - - -			56.67			44.4	
	Ay. 71 - - - - -			56.71 ₁			44.2	
	Ad. - - - - -			56.65			44.2	
8277	R. C. (Ad.) - - - - -	23	42	36.43	64	10	57.0	Gr. agrees within 0".8.
8279	Müdl. - - - - -	23	42	45.34	61	31	11.3	
	Ay. 40 - - - - -						12.0	
	Arm. - - - - -			45.48			11.7	
	Ay. 45 - - - - -						10.9	
	R. C. - - - - -						10.7	
	Q. - - - - -			45.57 ₂			11.2 ₂	
	Ay. 73 - - - - -			45.43 ₁			11.1 ₁	
	Ad. - - - - -			45.45			11.3	
8338	Müdl. - - - - -	23	54	[22.47]	61	28	52.7	P. M. from comparison with Bessel 1815. A. R. uncertain.
	Arm. - - - - -			22.03			53.9	
	R. C. - - - - -			22.01			53.6	
	R. C. ₂ - - - - -			21.88 ₁			52.4	
	Q. - - - - -			21.88 ₁			53.0 ₂	
	Yarn. - - - - -			21.73 ₂			53.9 ₂	
	Ay. 64 - - - - -			21.73			52.7	
	Sm. 64 - - - - -						52.3	
	Sm. 68 - - - - -			22.16			52.4	
	Ad. - - - - -			21.93			53.0	
8344	Müdl. - - - - -	23	55	15.06	60	31	35.8	The adopted P. M. in decl. (Mädler's) gives c.—o.: Auwers — 0".4 (1 obs.); F. LL. + 0".4 (2 obs.); Gr.— 0".7.
	Arm. - - - - -			15.22 ₂			36.6	
	Yarn. - - - - -			14.91 ₂			35.5	
	Ay. 60 - - - - -			15.01 ₂			35.1	
	LeV. 64 - - - - -						36.4	
	Ay. 72 - - - - -			14.91 ₁			36.2	
	Ad. - - - - -			15.05			36.0	

No.	Authority.	Right ascension.			Declination.			Remarks
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
8355	Mädl. - - - - -	23	56	12.55	65	24	8.1	
	Arm. - - - - -			12.56 ₁			10.2	
	Yarn. - - - - -			12.72 ₂			10.2 ₂	
	Q. - - - - -			12.66 ₃			9.5	
	Main - - - - -			12.41			8.9 ₂	
	Sm. - - - - -			-			10.2 ₁	
	Ay. 72 - - - - -			12.70			10.2	
	Ad. - - - - -			12.62			9.9	
8359	Mädl. - - - - -	23	57	47.64	61	35	29.3	The proper motion in A. R. used was — 0 ^s .002, derived by a rough comparison with Bessel's Bradley.
	Ay. 40 - - - - -			48.05 ₃			29.8	
	R. C. - - - - -			48.07			29.6	
	Arm. - - - - -			48.26			29.9	
	Pulc. 62 - - - - -			48.03			29.6	
	Ad. - - - - -			48.04			29.7	
8366	R. C. - - - - -	23	58	39.20	60	37	5.3	c. — o. in decl.: F. + 0 ["] .1; Lal. — 3 ["] .4; Gr. + 0 ["] .8. P. M. used = 0.
	Ay. 45 - - - - -			39.26			4.2	
	Ja. - - - - -			[38.92]			5.2	
	Ay. 60 - - - - -			39.29			4.2	
	LeV. 64 - - - - -			-			4.1	
	Ad. - - - - -			39.25			4.6	
8373	Mädl. - - - - -	23	59	57.48	63	30	0.5	
	Arm. - - - - -			57.64 ₂			0.6	
	Ay. 72 - - - - -			57.51 ₁			1.6	
	Ad. - - - - -			57.54			1.1	
46	T. - - - - -	0	10	15.27	60	50	21.0	Proper motion in declination (about — 0 ["] .01) neglected.
	R. C. - - - - -			14.90			18.5	
	Arm. - - - - -			15.04			18.6	
	R. C. ₂ - - - - -			15.08			18.8	
	Q. - - - - -			15.12			18.7 ₂	
	LeV. - - - - -			-			18.5	
	Ay. 71 - - - - -			14.95			20.3 ₁	
	Ad. - - - - -			15.07			19.1	
65	R. - - - - -	0	13	56.13	61	11	6.5	Groombridge gives 8 ["] .8. I have adopted P. M. = 0.
	R. C. - - - - -			56.16			8.4	
	Arm. - - - - -			56.18			8.7	
	Q. - - - - -			56.15 ₁			8.4 ₂	
	LeV. - - - - -			-			8.2	
	Ay. 71 - - - - -			56.11 ₁			7.9 ₂	
	Ad. - - - - -			56.15			8.0	
68	Mädl. - - - - -	0	14	[47.04]	67	7	47.7	Mädler depends chiefly upon Bessel 1815. P. M. by Auwers — 0 ["] .04 (1 obs.) Bessel 1815 — 0 ["] .06 (24 obs.) Adopted — 0 ["] .05 The A. R. is uncertain.
	Smyth 59 - - - - -			46.97			45.8	
	Q. - - - - -			46.84 ₂			44.9	
	Smyth 66 - - - - -			47.00			45.1	
	Main - - - - -			46.71			45.7	
	Ay. 73 - - - - -			46.71			44.9	
	Ad. - - - - -			46.85			45.3	
80	Mädl. - - - - -	0	17	54.38	61	8	16.9	Airy 60 has 40 observations in declina- tion.
	Ay. 40 - - - - -			-			16.8	
	Ay. 45 - - - - -			-			16.9	
	Arm. - - - - -			54.53			17.8	
	R. C. - - - - -			-			17.5	
	Ay. 60 - - - - -			54.57			17.2	
	Ay. 72 - - - - -			54.51			16.8	
	Ad. - - - - -			54.50			17.2	
114	Mädl. - - - - -	0	24	14.96	65	49	42.6	
	Ay. 50 - - - - -			15.08			44.1 ₂	
	Arm. - - - - -			14.92			[47.6]	
	R. C. ₂ - - - - -			15.16 ₂			42.8	
	Q. - - - - -			14.84 ₁₀			43.3 ₁₀	
	Ay. 64 - - - - -			14.92			43.4	
	Ay. 73 - - - - -			14.84 ₂			44.9 ₂	
	Ad. - - - - -			14.95			43.6	

No.	Authority.	Right ascensioo.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
126	St. - - - - -	0 25 54.50	62 14 30.4	Weight of 12-yr. and Pulc., 2; of Ay. 72, 1½ in declination.
	Ay. 12-yr. - - - - -		29.8	
	Pulc. - - - - -		29.0	
	Arm. - - - - -	54.72	29.0	
	Yarn. - - - - -	54.44 ₂	29.4	
	Q. - - - - -	54.55	30.0	
	Ay. 72 - - - - -	54.50	29.2	
	Ad. - - - - -	54.52	29.4	
131	Mädl. - - - - -	0 27 8.98	66 3 37.6	Weight, 1½ to Ay. 60, Ay. 64, Ay. 70.
	Arm. - - - - -	8.96	39.4	
	Yarn. - - - - -	[8.69 ₁]	41.0 ₃	
	Ay. 60 - - - - -	8.90	38.5	
	Ay. 64 - - - - -	9.12	38.4	
	Ay. 70 - - - - -	8.90	38.5	
	Ay. 73 - - - - -	9.10	37.0	
	Ad. - - - - -	8.99	38.7	
139	T. - - - - -	0 28 15.47 ₂	61 10 31.8	Piazzi gives 32''.3; hence the P. M. is very small.
	R. C. - - - - -	15.43	31.7	
	Arm. - - - - -	15.71 ₂	31.8	
	Ad. - - - - -	15.53	31.8	
175	R. C. - - - - -	0 34 37.61	65 27 41.8	With P. M. — 0''.02 Lalande gives c. — o. + 1''.7 (2 obs.); Gr. — 1''.3.
	Arm. - - - - -	[38.34 ₁]	41.5 ₂	
	Ay. 60 - - - - -		41.0 ₃	
	Q. - - - - -	37.69 ₁	41.6 ₃	
	Ay. 64 - - - - -	37.62	41.4	
	Ay. 72 - - - - -	37.58	41.3	
	Yarn. 72 - - - - -		42.6	
	Ad. - - - - -	37.62	41.6	
228	St. - - - - -	0 43 9.32	63 33 58.8	
	Pulc. - - - - -	9.52	59.0	
	Sm. - - - - -		58.4 ₃	
	Ad. - - - - -	9.42	58.8	
239	Mädl. - - - - -	0 45 [36.87]	60 26 17.1	Br. has no declination; Mädler's P. M. has been used.
	Arm. - - - - -	37.31	17.3	
	Yarn. - - - - -	37.24 ₃	17.4	
	Q. - - - - -	37.33 ₂	17.1 ₂	
	LeV. - - - - -		17.7	
	Ay. 72 - - - - -	37.35	17.7	
	Ad. - - - - -	37.31	17.5	
253	St. - - - - -	0 49 10.67	60 2 21.0	Everything has double weight save the A. R. of Main. Mädler's P. M. is confirmed (nearly) by Auwers, 1 obs., and has been retained.
	Main - - - - -	10.74	21.2	
	Leiden - - - - -		21.2	
	Ay. 71 - - - - -	10.61	22.0	
	Ad. - - - - -	10.66	21.3	
261	R. C. - - - - -	0 50 37.59	65 40 32.7	P. M. + 0 ^s .006 — 0''.02. c. — o.: Fed. — 0 ^s .31 + 0''.3; LL. — 0 ^s .16 — 1''.1; Gr. + 0 ^s .18 + 0''.4.
	Arm. - - - - -	37.33 ₂	33.7	
	Q. - - - - -	37.44 ₂	34.4 ₂	
	LeV. - - - - -		32.4	
	Ay. 72 - - - - -	37.69	32.7	
	Ad. - - - - -	37.55	33.1	
292	R. C. - - - - -	0 55 [56.10]	60 24 8.4	
	Ay. 72 - - - - -	55.31	9.5	
	Ad. - - - - -	55.31	9.1	
298	Mädl. - - - - -	0 57 [50.12]	65 18 0.9	The P. M., + 0''.03, is from Bessel 1815, compared with modern observations.
	Arm. - - - - -	50.54 ₂	3.4	
	R. C. - - - - -	50.37 ₂	4.0	
	Sm. - - - - -		2.6	
	Ay. 64 - - - - -	50.32	3.5	
	Ad. - - - - -	50.40	3.4	
302	R. C. - - - - -	0 58 30.37	62 5 32.6	Quite uncertain.
	Ad. - - - - -	30.37	32.6	

No.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
327	Mädl. - - - - -	1	2	13.26	68	6	45.3	
	Arm. - - - - -			13.62 ₂			46.5	
	Q. - - - - -			13.55 ₁			44.1	
	Ay. 64 - - - - -			13.31			45.8	
	Ay. 72 - - - - -			13.42 ₂			45.9	
	Ad. - - - - -			13.41			45.6	
335	Ay. 40 - - - - -	1	3	21.78	63	32	14.0	The P. M. is rather uncertain. Lalande gives 14''.2.
	H. 43 - - - - -			21.63			13.1	
	Arm. - - - - -			22.07 ₁			15.6	
	Sm. 59 - - - - -			.			14.2	
	Pnle. M. C. 62 - - - - -			21.39 ₁			15.9 ₁	
	Str. 66 - - - - -			.			14.5	
	Ad. - - - - -			21.71			14.4	
338	Mädl. - - - - -	1	3	33.80	64	21	13.7	I have corrected Ay. 64 by + 0''.18 for erroneous proper motion, as given in the B. A. C.
	Arm. - - - - -			33.96 ₁			12.3	
	R. C. ₂ - - - - -			33.84 ₁			12.3	
	Ay. 64 - - - - -			34.09			12.4	
	Q. - - - - -			33.98			12.2	
	Ad. - - - - -			33.94			12.3	
379	C. A. - - - - -	1	9	46.85	67	9	25.3	The A. R. for 1875 is uncertain.
	H. - - - - -			46.74			24.4	
	Arm. - - - - -			.			24.0	
	Sm. - - - - -			.			24.8	
	Ad. - - - - -			46.80			24.6	
382	R. C. - - - - -	1	10	13.44	62	53	5.4	
	Ad. - - - - -			13.44			5.4	
394	Mädl. - - - - -	1	12	45.45	64	0	6.0	The P. M. used, — 0''.04, represents the old observations, c. — 0.: Auvers — 2''.1 (1 obs.); Pi. + 0''.9; Gr. — 0''.2.
	Arm. - - - - -			45.44			7.0	
	R. C. ₂ - - - - -			45.40 ₂			6.1	
	Ay. 64 - - - - -			45.56			6.0	
	Main - - - - -			.			6.9 ₁	
	Ad. - - - - -			45.47			6.4	
412	St. - - - - -	1	17	7.52	67	28	35.4	
	Pule. - - - - -			7.62			35.8	
	Main - - - - -			.			35.7	
	Ay. 70 - - - - -			.			36.0 ₂	
	Ad. - - - - -			7.57			35.6	
438	Mädl. - - - - -	1	21	57.39	69	37	12.7	
	Arm. - - - - -			[57.08 ₂]			13.8	
	R. C. ₂ - - - - -			57.41			12.4	
	Yarn. - - - - -			57.46 ₂			12.4 ₉	
	Q. - - - - -			57.53 ₂			11.9 ₂	
	Ay. 64 - - - - -			57.51			13.1	
	Wn. 68 - - - - -			.			13.3 ₂	
	Ay. 70 - - - - -			57.37			12.9	
	Ad. - - - - -			57.44			12.8	
443	Mädl. - - - - -	1	23	19.41	69	22	28.2	
	R. C. - - - - -			.			27.8	
	Arm. - - - - -			19.24 ₁			28.2	
	R. C. ₂ - - - - -			19.48 ₂			25.7	
	Q. - - - - -			19.11 ₂			27.3 ₂	
	Ay. 73 - - - - -			19.21 ₂			28.0 ₂	
	Ad. - - - - -			19.31			27.4	
444	R. C. - - - - -	1	23	22.63	67	45	54.9	The P. M. used, + 0''.020 — 0''.10, represents Pi. and Gr. nearly in A. R., and in decl. gives c. — 0.: Pi. — 0''.5; Gr. + 0''.6.
	R. C. ₂ - - - - -			22.67 ₂			53.7	
	Q. - - - - -			22.33 ₁			55.5 ₂	
	Ay. 71 - - - - -			22.43 ₁			55.4	
	Ad. - - - - -			22.55			54.9	
450	R. C. - - - - -	1	24	14.21	62	56	55.6	Gr. gives 14°.09, 56''.9 with systematic correction.
	Arm. - - - - -			14.47			56.6	
	Ay. 73 - - - - -			14.01 ₁			59.2 ₁	
	Ad. - - - - -			14.27			56.7	

No.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
498	St. - - - - -	1 33 6.31	67 24 35.1	
	Pulc. - - - - -	6.45	34.3	
	Ay. 71 - - - - -	6.34	34.1	
	Ad. - - - - -	6.37	34.6	
499	Mädl. - - - - -	1 33 16.15	69 59 22.8	
	Arm. - - - - -	15.86 ₂	23.6	
	Laug. - - - - -	-	22.9 ₁₀	
	R. C. ₃ - - - - -	16.19	22.4	
	Q. - - - - -	16.09 ₁	23.7 ₂	
	Ay. 64 - - - - -	15.99	24.2	
	Ay. 70 - - - - -	15.93	22.9	
	Ay. 71 - - - - -	-	21.9	
	Ad. - - - - -	16.04	23.1	
535	Arg. - - - - -	1 38 43.72	63 14 3.4	
	Yarn. - - - - -	43.80 ₂	3.6	
	Wn. 67 - - - - -	43.68 ₂	3.1 ₂	
	Ay. 72 - - - - -	43.62 ₁	3.2	
	Ad. - - - - -	43.72	3.4	
564	St. - - - - -	1 45 25.33	63 3 11.6	Weight: St., 4; Arm., R. C. ₃ , 1; Q., $\frac{1}{2}$; the others, 2 each.
	Arm. - - - - -	25.28	11.2	
	R. C. ₃ - - - - -	25.18	11.1	
	Q. - - - - -	25.38 ₂	11.0 ₂	
	Main - - - - -	25.33	11.5	
	Ay. 71 - - - - -	25.26 ₁₁	11.5	
	Leid. - - - - -	-	11.5	
	Ad. - - - - -	25.30	11.5	
568	Mädl. - - - - -	1 46 18.79	68 4 10.8	Weights to Ay. 60 and Ay. 64 (in decl.), 2 each.
	Arm. - - - - -	19.05 ₂	11.4	
	Ay. 60 - - - - -	19.17	11.5	
	Ay. 64 - - - - -	18.98	11.3	
	Ay. 72 - - - - -	18.99 ₂	13.2 ₂	
	Ad. - - - - -	18.95	11.6	
588	Ay. 40 - - - - -	1 50 25.89	64 0 44.1	Lal. agrees very nearly, giving 25°.80, 43".5.
	R. C. - - - - -	25.86	44.2	
	Arm. - - - - -	25.99	43.0	
	Sm. 59 - - - - -	26.18	43.6	
	Sm. 64 - - - - -	-	42.7	
	Sm. 68 - - - - -	-	42.1	
	Pulc. 62 - - - - -	25.94	43.2	
	Ad. - - - - -	25.97	43.3	
610	Mädl. - - - - -	1 53 34.93	64 17 47.9	
	H. - - - - -	-	47.9	
	Arm. - - - - -	35.11 ₁	47.3	
	Ay. 64 - - - - -	35.08	47.8	
	Wn. 67 - - - - -	35.20	47.6	
	Ad. - - - - -	35.08	47.6	
611	Mädl. - - - - -	1 53 46.14	63 47 5.5	
	H. 43 - - - - -	-	6.0	
	Arm. - - - - -	46.47 ₂	6.5	
	Q. - - - - -	46.12 ₁	5.8 ₂	
	Ay. 73 - - - - -	46.23 ₁	6.1 ₁	
	Ad. - - - - -	46.24	6.1	
620	Mädl. - - - - -	1 55 [17.83]	64 30 2.7	C. — O.: Auwers + 1".6 (1 obs.); Gr. — 0".4; Bessel 1815 — 0".4. P. M. used — 0".06.
	R. C. - - - - -	17.16	3.9	
	Arm. - - - - -	17.49	5.6	
	Sm. - - - - -	17.72	4.5	
	Ad. - - - - -	17.46	4.7	

DETAILS OF POSITIONS—DIVISION IV.

DECLINATIONS

OF THE

LAKE SURVEY CATALOGUE REVISED.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
Gr. 1854	R. C. - - - - -	39 19 49.0	4185	Müdl. - - - - -	57 28 14.8
	Arm. - - - - -	48.8		Arm. - - - - -	15.3
	Ad. - - - - -	48.9		Pulc. - - - - -	16.2 ₂
				Ad. - - - - -	15.4
4108	Arm. - - - - -	57 45 2.5	4188	St. - - - - -	39 42 44.2
	R. C. - - - - -	1.5		Pulc. - - - - -	43.5
	Pulc. - - - - -	1.9		Ad. - - - - -	43.9
	Ay. 64 - - - - -	2.0			
	Ad. - - - - -	2.0	4194	Arm. - - - - -	55 51 4.3
4121	Arm. - - - - -	54 07 48.6		Pulc. - - - - -	5.8
	Pulc. - - - - -	49.0		R. C. - - - - -	4.3
	Wn. 67 - - - - -	48.8		R. C. ₂ - - - - -	3.6
	Ay. 71 - - - - -	49.4 ₁		Ad. - - - - -	4.5
	Ad. - - - - -	48.9	Gr. 1894	R. C. - - - - -	42 2 51.1
4123	St. - - - - -	57 43 38.2		H. - - - - -	51.6
	R. C. - - - - -	38.5		Pulc. - - - - -	51.6
	Yarn. - - - - -	37.4		Ad. - - - - -	51.4
	Ay. 69 - - - - -	38.6	4203	12-yr. - - - - -	56 24 17.5
	Leid. - - - - -	38.3		R. C. - - - - -	16.9
	Eng. - - - - -	37.7		Arm. - - - - -	17.4
	Ay. 72 - - - - -	38.5 ₉		Pulc. - - - - -	18.8
	Main - - - - -	37.8 ₁₄		Yarn. - - - - -	17.7
	Ad. - - - - -	38.2		Ad. - - - - -	17.7
4126	St. - - - - -	41 21 22.2	4216	St. - - - - -	59 5 37.3
	Main - - - - -	20.7		Pulc. - - - - -	36.9
	Pulc. - - - - -	21.9		Ad. - - - - -	37.1
	Ad. - - - - -	21.8	4217	Arm. - - - - -	52 13 30.8
4128	T. - - - - -	33 45 36.0		R. C. - - - - -	31.4
	H. - - - - -	38.9		Yarn. - - - - -	30.7
	Arm. - - - - -	37.4		R. C. ₂ - - - - -	32.5 ₁
	Pulc. - - - - -	37.4		Ay. 73 - - - - -	33.8 ₁
	Yarn. - - - - -	37.9		Ad. - - - - -	31.5
	Ay. 60 - - - - -	38.7	4219	Rii. - - - - -	59 27 34.5
	Ad. - - - - -	37.8		R. C. - - - - -	34.0
4148	Arm. - - - - -	49 40 40.4		Arm. - - - - -	34.0
	R. C. - - - - -	42.9		Ja. - - - - -	35.2
	Pulc. - - - - -	41.6		Pulc. - - - - -	33.3
	Ay. 64 - - - - -	40.9		Ad. - - - - -	33.7
	Yarn. - - - - -	40.9 ₂	Gr. 1903	Arg. - - - - -	53 45 41.6
	Ad. - - - - -	41.4		H. - - - - -	41.6
Gr. 1867	R. C. - - - - -	38 35 47.9		Pulc. - - - - -	41.2
	Ay. 50 - - - - -	47.0		Ad. - - - - -	41.5
	Ad. - - - - -	47.4	4233	T. - - - - -	33 56 18.7
4159	R. C. - - - - -	58 33 36.7		H. - - - - -	20.5
	Pulc. - - - - -	37.4		Arm. - - - - -	20.5
	Ay. 12-yr. - - - - -	37.7		Main - - - - -	19.2
	Arm. - - - - -	37.6		Ay. 64 - - - - -	18.9
	R. C. ₂ - - - - -	35.6		Ad. - - - - -	19.5
	Ad. - - - - -	37.1	4235	St. - - - - -	42 2 13.5
4177	R. C. - - - - -	43 14 7.8		Ay. 68 - - - - -	12.9
	Arm. - - - - -	6.8		Pulc. - - - - -	12.7
	Yarn. - - - - -	7.0		Ay. 70 - - - - -	13.4
	Ay. 64 - - - - -	7.0		Main - - - - -	12.5
	Ad. - - - - -	7.1		Ad. - - - - -	13.1
4180	Arm. - - - - -	52 15 16.6	4244	Y. - - - - -	37 6 52.6
	R. C. - - - - -	17.4		Ja. - - - - -	52.5
	Ay. 64 - - - - -	17.9		R. C. ₂ - - - - -	51.2
	Paris 64 - - - - -	17.3		Main - - - - -	52.5
	Ad. - - - - -	17.3		Sm. - - - - -	53.1
				Ad. - - - - -	52.4

4128. P. M. — 0''.07, from Pi.

4188. St. corrected for Auwers's Bradley.

4233. Main's observation of 1870 gives 23''.8 and is excluded.

No.	Authority.	Declination.			No.	Authority.	Declination.		
		°	'	"			°	'	"
Gr. 1907	R. C. - - - - -	40	23	23.4	4345	Ja. - - - - -	38	59	23.6
	Bonn. - - - - -			24.8 ₁		Ay. 60 - - - - -			24.6
	Ad. - - - - -			23.9		R. C. ₂ - - - - -			23.8
4258	12-yr. - - - - -	41	33	45.6		Ay. 64 - - - - -			24.3
	R. C. - - - - -			43.8		Yarn. - - - - -			24.0
	6-yr. - - - - -			46.5 ₂		Ay. 68 - - - - -			24.4
	Kbg. - - - - -			46.8 ₃		Ay. 72 - - - - -			25.3 ₁
	Ad. - - - - -			45.5		Ad. - - - - -			24.0
4282	H. - - - - -	44	47	15.6	4348	Arm. - - - - -	54	46	34.4
	Ay. 45 - - - - -			15.2		R. C. ₂ - - - - -			34.4
	R. C. - - - - -			15.5		Ay. 64 - - - - -			35.1
	Ja. - - - - -			16.8		Ay. - - - - -			34.7
	Yarn. - - - - -			14.6 ₃		Main - - - - -			35.4
	Ad. - - - - -			15.6		Ad. - - - - -			34.8
Arg. 124	Arg. - - - - -	52	27	1.2	Gr. 1938	R. C. - - - - -	44	13	43.0
	Ad. - - - - -			1.2		Arm. - - - - -			43.2
4285	Arm. - - - - -	39	57	30.8		Ad. - - - - -			43.1
	12-yr. - - - - -			31.0	4350	Pulc. - - - - -	46	51	19.2
	R. C. - - - - -			30.0		H. - - - - -			19.4
	Yarn. - - - - -			29.3		R. C. - - - - -			18.6
	R. C. ₂ - - - - -			29.3		Ja. - - - - -			17.8
	Wn. 67 - - - - -			30.3		Ad. - - - - -			18.8
	Ay. 71-72 - - - - -			30.2	4360	Pulc. - - - - -	31	27	34.5
	Ay. 73 - - - - -			30.7		Arm. - - - - -			34.8
	Ad. - - - - -			30.2		Yarn. - - - - -			32.9
4287	H. - - - - -	46	7	26.8		Ay. 60 - - - - -			35.4
	R. C. - - - - -			26.3		Ay. 67-73 - - - - -			35.7
	Ja. - - - - -			27.2		Ad. - - - - -			34.6
	Arm. - - - - -			26.0	4366	Arm. - - - - -	57	2	24.1
	Ay. - - - - -			26.4		R. C. - - - - -			24.1
	LeV. - - - - -			26.7		R. C. ₂ - - - - -			24.9
	Ad. - - - - -			26.6		Ay. 60 - - - - -			25.6
Gr. 1925	R. C. - - - - -	50	50	24.4		Yarn. - - - - -			23.3
	H. - - - - -			24.5		Ad. - - - - -			24.4
	Rü. - - - - -			[22.9]	4384	Arm. - - - - -	36	28	5.1
	Pulc. - - - - -			24.6		Ay. 60 - - - - -			5.1
	Ad. - - - - -			24.5		Ay. 64-69 - - - - -			5.5
4303	Arm. - - - - -	49	8	55.0		Leid. - - - - -			5.4
	Ay. 60 - - - - -			54.1		Eng. - - - - -			6.0
	R. C. ₂ - - - - -			53.9		Ay. 70-1-2 - - - - -			5.9
	Yarn. - - - - -			54.2		Ad. - - - - -			5.4
	Ad. - - - - -			54.5	4389	H. - - - - -	45	56	14.7
4311	R. - - - - -	38	11	50.9		R. C. - - - - -			13.0
	H. - - - - -			50.9		Arm. - - - - -			13.6
	R. C. - - - - -			50.7		Ja. - - - - -			14.7
	Arm. - - - - -			49.9		Ad. - - - - -			14.0
	Ja. - - - - -			50.5	4407	R. - - - - -	38	5	24.2
	Ay. - - - - -			50.4		12-yr. - - - - -			23.4
	Yarn. - - - - -			50.4		R. C. - - - - -			23.5
	Wn. - - - - -			50.9		Ja. - - - - -			23.0
	Ad. - - - - -			50.6		Ay. 69 - - - - -			22.3
4335	St. - - - - -	56	38	18.3		Wn. - - - - -			22.6
	R. C. ₂ - - - - -			17.8		Leid. - - - - -			22.6
	Ay. 72 - - - - -			19.4		Eng. - - - - -			22.4
	Main - - - - -			18.3		Ay. 70 - - - - -			22.7
	Ad. - - - - -			18.4		Ad. - - - - -			22.8
4341	H. - - - - -	47	52	31.2	4408	Arm. - - - - -	39	12	0.8
	R. C. - - - - -			30.2		R. C. - - - - -			1.4
	Ja. - - - - -			28.9		Pulc. - - - - -			0.7
	Ad. - - - - -			30.1		Ay. 64 - - - - -			1.3
						Ad. - - - - -			1.1

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
4414	Pulc. - - - - -	39 23 24.1	Gr. 1979	Rü. - - - - -	38 30 46.0 ₁
	R. C. - - - - -	24.2		R. C. - - - - -	45.7
	Arm. - - - - -	26.0 ₃		Arm. - - - - -	45.1
	Ay. 64 - - - - -	24.1		Ad. - - - - -	45.5
	Ad. - - - - -	24.4			
4415	St. - - - - -	39 9 50.2	X111, 71	T. - - - - -	44 33 27.0
	Ay. 64 - - - - -	49.5		R. C. - - - - -	27.0
	Wn. - - - - -	50.0		Pulc. - - - - -	27.4
	Pulc. - - - - -	48.8		Ad. - - - - -	27.2
	Ad. - - - - -	49.6			
4416	T. - - - - -	57 29 53.8 ₁	4479	R. C. - - - - -	37 41 15.2
	Rü. - - - - -	[50.5]		Arm. - - - - -	13.8
	H. - - - - -	53.3		Ja. - - - - -	14.1
	R. C. - - - - -	53.3		Yarn. - - - - -	12.6
	Arm. - - - - -	54.2		Ay. 68 - - - - -	13.8
	Q. 63 - - - - -	51.9 ₁		Ad. - - - - -	13.9
	Ad. - - - - -	53.4	4484	Pulc. - - - - -	55 34 43.1
4420	Arm. - - - - -	41 27 26.9		Ay. - - - - -	43.2
	R. C. - - - - -	27.2		Yarn. - - - - -	43.0
	R. C. ₂ - - - - -	27.0		Ay. 69 - - - - -	43.1
	Ay. 64 - - - - -	27.6		Main - - - - -	41.9
	Ad. - - - - -	27.2		Leid. - - - - -	43.2
4433	T. - - - - -	40 48 55.4		Eng. - - - - -	42.3
	Ay. 45 - - - - -	54.3		Main 72 - - - - -	42.1
	H. - - - - -	54.3		Ad. - - - - -	42.8
	R. C. - - - - -	55.2	4486	Ay. 60 - - - - -	55 34 30.6
	Arm. - - - - -	53.9		R. C. ₂ - - - - -	30.9
	Ay. 60 - - - - -	55.6		Ay. 64 - - - - -	31.0
	Yarn. - - - - -	55.0		Wn. - - - - -	31.9
	Ad. - - - - -	54.8		Yarn. - - - - -	31.0
4438	Arm. - - - - -	41 30 55.7		Ay. 68-73 - - - - -	31.7
	R. C. - - - - -	57.1		Ad. - - - - -	31.1
	Pulc. - - - - -	56.5	4493	Ay. 60 - - - - -	55 38 22.7
	Ay. 64 - - - - -	57.0		R. C. ₂ - - - - -	22.5
	Ad. - - - - -	56.6		Yarn. - - - - -	22.4 ₂
4451	St. - - - - -	41 13 53.0		Ay. 69 - - - - -	23.4
	Ay. 69 - - - - -	52.7		Ay. 64 - - - - -	22.7
	Ay. 70 - - - - -	53.3		Ad. - - - - -	22.8
	Leid. - - - - -	52.4	Gr. 1991	H. - - - - -	46 40 45.4
	Eng. - - - - -	52.2		Rü. - - - - -	45.2
	Pulc. - - - - -	51.8		R. C. - - - - -	45.7
	Ad. - - - - -	52.5		Ad. - - - - -	45.4
4453	T. - - - - -	34 45 24.0	Gr. 1994	H. - - - - -	41 22 49.4
	H. - - - - -	23.7		R. C. - - - - -	48.3
	Arm. - - - - -	24.4		Pulc. - - - - -	48.3
	Main - - - - -	23.3		Ad. - - - - -	48.7
	Ad. - - - - -	23.8	4519	R. - - - - -	42 44 59.2
4456	Arm. - - - - -	50 20 24.0 ₁		H. - - - - -	60.5
	R. C. - - - - -	24.7		R. C. - - - - -	60.0
	Pulc. - - - - -	24.3		Ja. - - - - -	58.7
	Ou. - - - - -	23.8		Ay. - - - - -	60.1
	Ay. 60 - - - - -	23.0		Wn. - - - - -	60.0
	Ad. - - - - -	24.0		Yarn. - - - - -	[57.6]
4457	Rü. - - - - -	35 47 5.8		Ad. - - - - -	59.8
	Ja. - - - - -	6.6	4536	St. - - - - -	37 49 23.9
	Arg. - - - - -	6.1		Yarn. - - - - -	24.1
	Main - - - - -	6.0 ₃		Pulc. - - - - -	23.5
	Smyth - - - - -	6.7		Ay. 71 - - - - -	25.1 ₂
	Ad. - - - - -	6.3		Ad. - - - - -	23.9
4467	Arm. - - - - -	40 48 24.7	4540	R. C. - - - - -	55 59 22.3
	R. C. - - - - -	26.2		Arm. - - - - -	22.4
	Pulc. - - - - -	26.8		6-yr - - - - -	22.4 ₂
	Ay. 64 - - - - -	26.6		Wn. - - - - -	21.7
	Ad. - - - - -	26.1		Ad. - - - - -	22.2

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
4538	12-yr. - - - - - R. C. - - - - - Arm. - - - - - Ay. 60 - - - - - R. C. ₂ - - - - - Ad. - - - - -	49 39 19.9 20.2 19.4 20.0 19.0 19.7	XIII, 189	T. - - - - - H. - - - - - R. C. - - - - - Arm. - - - - - Pulc. - - - - - Ad. - - - - -	52 41 36.7 36.1 36.5 35.3 36.6 36.3
4545	Gr. - - - - - H. - - - - - Pulc. - - - - - R. C. - - - - - Ja. - - - - - Wn. - - - - - Ad. - - - - -	44 50 11.9 13.8 12.7 12.6 12.5 12.1 12.6	Arg. 142	Arg. - - - - - Pulc. - - - - - Ad. - - - - -	56 31 8.4 9.0 8.6
4550	R. C. - - - - - Arm. - - - - - Wn. - - - - - Sm. - - - - - Main - - - - - Ad. - - - - -	53 19 35.3 36.0 36.8 36.4 36.8 36.3	4592	T. - - - - - Main - - - - - Ad. - - - - -	31 31 37.1 36.3 36.7
4552	Rü. - - - - - Ay. 45 - - - - - H. - - - - - Ay. 50 - - - - - Ja. - - - - - Yarn. - - - - - Paris - - - - - Ay. 73 - - - - - Ad. - - - - -	36 55 [50.6] 52.1 52.9 52.7 52.4 [49.9 ₂] 53.0 52.6 52.7	4595	R. C. - - - - - Ja. - - - - - Yarn. - - - - - Ad. - - - - -	39 7 50.5 47.7 49.5 ₂ 49.2
4555	R. C. - - - - - Arm. - - - - - R. C. ₂ - - - - - Sm. - - - - - Ad. - - - - -	53 13 50.1 50.1 50.8 51.1 50.5	4596	Gr. - - - - - Ay. - - - - - H. - - - - - R. C. - - - - - Ja. - - - - - Wn. - - - - - Ad. - - - - -	41 42 58.8 59.1 58.6 58.3 59.4 58.2 58.7
4556	T. - - - - - Rü. - - - - - H. - - - - - R. C. - - - - - Arm. - - - - - Ad. - - - - -	51 21 6.5 4.5 4.8 5.2 8.0 5.8	4600	Rü. - - - - - H. - - - - - R. C. - - - - - Ja. - - - - - Ad. - - - - -	39 10 8.4 8.5 7.6 7.3 7.9
4564	R. C. - - - - - Arm. - - - - - R. C. ₂ - - - - - Ay. 64 - - - - - Ad. - - - - -	53 33 12.8 12.7 13.2 14.0 13.2	4605	Arm. - - - - - R. C. - - - - - Yarn. - - - - - R. C. ₂ - - - - - Ay. 73 - - - - - Ad. - - - - -	55 3 27.7 27.0 27.6 29.1 27.9 ₁ 27.6
Gr. 2030	H. - - - - - Rü. - - - - - R. C. - - - - - Pulc. - - - - - Ad. - - - - -	57 50 23.6 23.3 22.9 23.8 23.4	4609	H. - - - - - R. C. - - - - - Wn. - - - - - Ad. - - - - -	42 40 24.7 23.2 22.3 23.5
4568	Arm. - - - - - R. C. - - - - - Ay. 60 - - - - - Paris 64 - - - - - Main 71 - - - - - Ad. - - - - -	55 18 50.7 52.7 53.6 53.2 52.2 ₁₀ 52.8	4610	H. - - - - - Ja. - - - - - Arg. - - - - - Sm. - - - - - Yarn. - - - - - Main - - - - - Ad. - - - - -	31 48 42.6 43.0 42.0 ₂ 43.6 42.0 ₃ 43.3 42.8
Gr. 2032	H. - - - - - Rü. - - - - - R. C. - - - - - Pulc. - - - - - Ad. - - - - -	42 18 18.3 18.3 16.4 17.4 17.6	4627	Rü. - - - - - H. - - - - - Arm. - - - - - Ja. - - - - - Sm. - - - - - Ad. - - - - -	35 23 35.2 ₂ 33.5 34.1 ₁ 33.3 33.1 33.7
			4628	H. - - - - - Arm. - - - - - Pulc. - - - - - Ja. - - - - - R. C. ₂ - - - - - Sm. - - - - - Ay. 72 - - - - - Ad. - - - - -	35 17 10.9 11.0 11.1 9.6 10.0 ₁ 10.2 9.2 10.1

DETAILS OF POSITIONS—DIVISION IV.

141

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
Gr. 2056	R. C. - - - - -	59 9 32.6	Gr. 2077	R. C. - - - - -	42 41 41.0
	Rii. - - - - -	29.6		Rii. - - - - -	39.4
	Pule. - - - - -	32.1		Arm. - - - - -	40.6
	Arm. - - - - -	31.4		Ad. - - - - -	40.5
	Oom. - - - - -	31.1			
	Ad. - - - - -	31.4	4699	Pi. - - - - -	44 26 59.7
4632	Ja. - - - - -	35 3 51.4		Gr. - - - - -	58.6
	Ay. 64 - - - - -	50.9		Il. - - - - -	59.7
	Main - - - - -	51.6		Arm. - - - - -	59.7
	Sm. - - - - -	49.7 ₁		Ay. 64 - - - - -	58.8
	Yarn. - - - - -	51.4		Wn. - - - - -	58.8
	Ad. - - - - -	51.3		Leid. - - - - -	59.3
				Eng. - - - - -	59.2
Gr. 2057	R. C. - - - - -	40 57 18.4		Ay. 70 - - - - -	59.3
	Rii. - - - - -	16.6		Ad. - - - - -	59.3
	Arm. - - - - -	18.1	4701	Arm. - - - - -	50 2 57.3
	Ad. - - - - -	17.7		Leid. - - - - -	58.2
Gr. 2058	R. C. - - - - -	42 48 2.7		Eug. - - - - -	58.3
	Arm. - - - - -	2.8		Ay. 69 - - - - -	58.5
	Ad. - - - - -	2.7		Ay. 71 - - - - -	58.5
				Wn. 73 - - - - -	57.3
4649	Arm. - - - - -	54 20 37.5		Ad. - - - - -	58.0
	Ay. 40 - - - - -	38.0	Gr. 2082	R. C. - - - - -	59 55 49.6
	Ay. 45 - - - - -	37.5		Arm. - - - - -	50.2
	R. C. - - - - -	37.2		Bonn. - - - - -	48.3 ₁
	R. C. ₂ - - - - -	36.5		Ad. - - - - -	49.6
	Ad. - - - - -	37.4			
4652	Yarn. - - - - -	32 38 33.7	4714	T. - - - - -	32 53 4.2
	Ja. - - - - -	35.4		Arm. - - - - -	2.8
	R. C. ₂ - - - - -	34.6		Main - - - - -	3.6
	Sm. - - - - -	39.7		Wn. - - - - -	3.1
	Ad. - - - - -	35.8		Ad. - - - - -	3.4
4676	Ja. - - - - -	32 10 11.6	Gr. 2084	R. C. - - - - -	59 8 23.5
	Main - - - - -	11.3		Oom. - - - - -	22.5
	Sm. - - - - -	11.5		Ad. - - - - -	22.8
	Main - - - - -	11.9			
	Ad. - - - - -	11.6	4725	Ad. - - - - -	52 22 22.7
4678	Ja. - - - - -	32 15 47.8	4726	Arm. - - - - -	52 22 28.0
	Q. 57 - - - - -	49.5		12-yr. - - - - -	30.2
	Main - - - - -	49.4		R. C. - - - - -	30.4
	Sm. - - - - -	49.2		Ay. 60 - - - - -	29.1
	Ad. - - - - -	49.0		R. C. ₂ - - - - -	29.2 ₁
XIII, 289	T. - - - - -	46 21 36.3		Main - - - - -	30.6
	H. - - - - -	36.6		Ad. - - - - -	29.4
	Arm. - - - - -	35.4	4728	H. - - - - -	42 6 22.8
	Pule. - - - - -	35.8 ₁		R. C. - - - - -	22.8
	Ad. - - - - -	36.0		Arm. - - - - -	20.7
4684	T. - - - - -	51 34 23.1		Ja. - - - - -	23.2
	Rii. - - - - -	27.0		Wn. - - - - -	21.8
	R. C. - - - - -	24.8		Ay. 72 - - - - -	22.8 ₁
	Arm. - - - - -	25.9		Ad. - - - - -	22.5
	Ay. 12-yr. - - - - -	25.1	4736	Ay. 40 - - - - -	53 7 3.8
	Ad. - - - - -	25.0		R. C. - - - - -	3.3
4694	Ja. - - - - -	31 26 54.6		Ja. - - - - -	3.0
	Arm. - - - - -	53.8		Ad. - - - - -	3.4
	Yarn. - - - - -	53.2	4738	H. - - - - -	40 19 29.9
	Sm. 60 - - - - -	55.5		R. C. - - - - -	29.2
	Sm. 63 - - - - -	54.9		Ja. - - - - -	30.8
	Main - - - - -	53.7		Sm. - - - - -	30.5
	Wn. 67 - - - - -	53.5		Ad. - - - - -	30.1
	Sm. 69 - - - - -	52.5			
	Wn. 73 - - - - -	55.1			
	Ad. - - - - -	54.2			

4684. Confirmed by Wn. 73, 74.

XIII, 289. There may be enough P. M. to make the declination uncertain.

4694. The P. M. adopted is $-0''.11$; c. — o.: Lal. $+1''.7$; B. Z. $-4''.3$.

Gr. 2077. Half weight to Rii.

4725. From following star by observed differences, using Dembowsky's measures.

4726. The adopted value needs a correction of $+0''.3$.

No.	Authority.	Declination.			No.	Authority.	Declination.		
		°	'	"			°	'	"
4741	Pulc. V. C. - - - - - Ay. 69-70 - - - - - Leid. - - - - - Eng. - - - - - Ad. - - - - -	46	39	46.9 47.1 47.3 47.1 47.1	4804	Arm. - - - - - Pulc. - - - - - Q. - - - - - Ay. 60 - - - - - R. C. ₂ - - - - - Ad. - - - - -	50	24	16.3 17.3 17.8 17.6 18.3 17.5
4742	St. - - - - - R. C. ₂ - - - - - Main - - - - - Ad. - - - - -	51	56	40.1 41.4 ₁ 49.8 49.1	4803	T. - - - - - R. - - - - - Arm. - - - - - Wn. - - - - - Ay. 73 - - - - - Ad. - - - - -	32	20	53.1 52.7 53.5 54.8 54.2 ₂ 53.6
4747	T. - - - - - H. - - - - - Arm. - - - - - Yarn. - - - - - Main - - - - - Ay. - - - - - Ad. - - - - -	36	5	11.6 13.9 13.2 12.8 14.5 13.2 13.2	4805	Gr. - - - - - R. C. - - - - - Ja. - - - - - Ay. 60 - - - - - Ay. 64 - - - - - Wn. - - - - - Ad. - - - - -	42	21	39.0 40.1 39.1 40.2 ₂ 39.5 38.9 39.4
4752	R. C. - - - - - Pulc. - - - - - Arm. - - - - - Ay. 64 - - - - - Ay. 68 - - - - - Ad. - - - - -	51	53	9.8 9.4 8.2 9.6 ₂ 10.0 9.4	4808	St. - - - - - R. C. ₂ - - - - - Ay. 64 - - - - - Ay. 69 - - - - - Eng. - - - - - Arg. - - - - - Main - - - - - Ay. 71 - - - - - Ad. - - - - -	30	55	16.2 15.6 16.1 15.6 15.6 16.4 15.6 15.8 15.9
4756	Ay. - - - - - R. C. - - - - - Ja. - - - - - Sm. - - - - - LeV. - - - - - Ad. - - - - -	52	36	35.1 35.5 36.1 35.1 35.6 35.6	4812	St. - - - - - R. C. ₂ - - - - - Wn. - - - - - Main - - - - - Ad. - - - - -	38	51	21.1 20.2 22.0 20.7 21.0
4758	H. - - - - - R. C. - - - - - Ja. - - - - - Ay. 64 - - - - - Ad. - - - - -	39	22	11.0 10.1 8.8 9.7 9.9	4816	Gr. - - - - - R. C. - - - - - Ja. - - - - - Wn. - - - - - Yarn. 72 - - - - - Ad. - - - - -	37	30	46.3 44.8 46.1 45.5 45.9 ₁ 45.5
Gr. 2102	R. C. - - - - - Ril. - - - - - Arm. - - - - - Yarn. - - - - - Ad. - - - - -	55	26	22.5 23.0 ₁ 21.0 21.8 ₃ 22.0	4820	Ril. - - - - - Ja. - - - - - Main - - - - - Sm. - - - - - Ad. - - - - -	33	5	0.4 0.8 2.1 1.3 1.2
4778	Ril. - - - - - R. C. - - - - - Ja. - - - - - Yarn. - - - - - Q. - - - - - Ad. - - - - -	37	46	24.7 ₁ 25.4 24.1 23.6 23.8 24.3	4823	Pulc. - - - - - Arm. - - - - - Ay. 60 - - - - - Yarn. - - - - - R. C. ₂ - - - - - Ad. - - - - -	30	17	21.2 21.2 21.4 20.2 ₂ 23.4 21.5
4783	R. C. - - - - - Ja. - - - - - Ay. 60 - - - - - Ay. 64 - - - - - Wn. - - - - - Ad. - - - - -	38	57	31.1 30.6 31.8 32.1 31.9 31.5	4825	Pi. - - - - - T. - - - - - H. - - - - - Arm. - - - - - Main - - - - - Ay. 73 - - - - - Ad. - - - - -	37	10	33.9 34.5 34.1 33.9 35.5 33.6 34.2
4797	R. - - - - - Yarn. - - - - - Ja. - - - - - Main - - - - - Sm. - - - - - Ay. - - - - - Ad. - - - - -	36	45	24.6 ₁ 25.9 ₂ 24.3 26.5 25.9 25.2 25.5	4826	Ad. - - - - -	53	26	58.5

4826. See Introduction, where the star is investigated in detail.

4825. P. M. used — 0".05; not given in catalogue.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
4827	Rii. - - - - -	47 20 5.8	4907	H. - - - - -	49 14 6.9
	Ay. 45 - - - - -	6.4		R. C. - - - - -	7.8
	R. C. - - - - -	3.7		Arm. - - - - -	7.1
	Ja. - - - - -	5.9		On. - - - - -	8.3
	Wn. - - - - -	5.6		Ay. 6-yr. - - - - -	8.2
	Ad. - - - - -	5.5		Main - - - - -	9.2
				Ad. - - - - -	7.9
4830	C. A. - - - - -	49 54 49.1	Gr. 2157	R. C. - - - - -	51 53 34.1
	H. - - - - -	49.0		Rii. - - - - -	34.5 ₁
	R. C. - - - - -	48.9		Wn. - - - - -	33.9 ₁
	Ja. - - - - -	49.5		Ad. - - - - -	34.2
	Yarn. - - - - -	49.3			
	Q. - - - - -	49.7	4906	Arg. - - - - -	37 47 9.1
	On. - - - - -	50.2		Ay. 64-68 - - - - -	8.8
	Ad. - - - - -	49.4		Ad. - - - - -	9.0
4841	Gr. - - - - -	44 10 56.4	4917	Rii. - - - - -	46 59 31.2
	R. - - - - -	55.8		R. C. - - - - -	30.4
	Ay. - - - - -	56.4		Ja. - - - - -	29.7
	R. C. - - - - -	56.1		Ad. - - - - -	30.4
	Ja. - - - - -	55.4	4918	Pulc. - - - - -	59 48 8.7
	Yarn. - - - - -	55.7		Str. - - - - -	10.0
	Ay. 67 - - - - -	56.1		Ad. - - - - -	9.7
	Ad. - - - - -	56.0	4934	B. A. C. - - - - -	41 38 27.1
4843	St. - - - - -	44 56 42.2		R. C. - - - - -	26.5
	Pulc. - - - - -	41.3		Ja. - - - - -	27.0
	Ad. - - - - -	41.7		Sm. - - - - -	27.2
4845	T. - - - - -	54 33 51.3		Ad. - - - - -	26.9
	R. - - - - -	51.8	4937	Gauss - - - - -	50 8 25.9
	H. - - - - -	52.3		Hausen - - - - -	25.9
	R. C. - - - - -	51.8		Arg. - - - - -	25.3
	Arm. - - - - -	53.0		Pulc. - - - - -	26.6
	R. C. ₂ - - - - -	51.2		Yarn. - - - - -	23.5 ₃
	Ad. - - - - -	51.9		Ad. - - - - -	25.3
4863	Ja. - - - - -	37 17 23.9	4942	R. C. - - - - -	40 8 30.9
	Main - - - - -	24.3		Ja. - - - - -	30.8
	Sm. - - - - -	24.5		Ay. 64 - - - - -	31.6
	Ad. - - - - -	24.2		Sm. - - - - -	32.5
4870	Ay. 45 - - - - -	40 59 22.0		Ad. - - - - -	31.4
	R. C. - - - - -	21.8	4943	R. C. - - - - -	39 45 43.6
	Ja. - - - - -	21.0		Arm. - - - - -	42.8
	Ad. - - - - -	21.6		Pulc. - - - - -	43.5
4881	T. - - - - -	45 42 55.6		Ay. 60 - - - - -	43.5
	R. C. - - - - -	55.1		Ad. - - - - -	43.4
	Arm. - - - - -	56.7	4952	Rii. - - - - -	47 46 19.4 ₁
	R. C. ₂ - - - - -	54.3		R. C. - - - - -	18.0
	Ad. - - - - -	55.4		Ja. - - - - -	20.0
4885	Pi. - - - - -	42 54 26.9		Ad. - - - - -	19.1
	Gr. - - - - -	26.9	4961	Ay. 45 - - - - -	35 41 46.3
	T. - - - - -	25.8		H. - - - - -	46.7
	R. C. - - - - -	27.6		Arm. - - - - -	46.8
	Wn. - - - - -	26.7		Ad. - - - - -	46.6
	Ad. - - - - -	26.8	4965	Rii. - - - - -	45 8 4.2
4897	Arg. - - - - -	38 19 38.1		Ay. - - - - -	2.1
	Wn. - - - - -	38.0		R. C. - - - - -	3.1
	Ad. - - - - -	38.1		Ja. - - - - -	2.4
4903	R. C. - - - - -	46 38 15.8		Sm. - - - - -	2.3
	Arm. - - - - -	17.1		Ad. - - - - -	2.8
	LeV. 64 - - - - -	16.8			
	Ad. - - - - -	16.1			

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
4974	C. A. - - - - -	48 8 29.2	5061	Arm. - - - - -	30 4 14.9
	P. M. - - - - -	29.3		Ay. 64 - - - - -	14.3
	Pulc. - - - - -	30.1		Ay. 72 - - - - -	15.0
	R. C. - - - - -	28.9		Main - - - - -	14.3
	Arm. - - - - -	28.2		Ad. - - - - -	14.6
	Q. 57 - - - - -	30.1	Arg. 164	Arg. - - - - -	41 25 50.2
	Q. 59 - - - - -	29.6 ₁			
	R. C. ₂ - - - - -	29.0	5064	T. - - - - -	50 40 1.2
	Ay. 60 - - - - -	29.3		R. C. - - - - -	2.7
	Main 72 - - - - -	31.1 ₁		R. C. ₂ - - - - -	2.7
	Ad. - - - - -	29.2		Yarn. - - - - -	2.1
				Wn. - - - - -	0.6
4980	R. C. - - - - -	48 38 5.5		Ad. - - - - -	1.9
	Arm. - - - - -	4.3	5071	H. - - - - -	52 24 34.5
	R. C. ₂ - - - - -	4.4		R. C. - - - - -	34.5
	Leid. - - - - -	5.1		Ja. - - - - -	34.9
	Ad. - - - - -	4.9		Sm. - - - - -	34.5
4992	H. - - - - -	55 2 17.8		Ad. - - - - -	34.6
	R. C. - - - - -	17.8	5072	Arm. - - - - -	33 22 56.5
	Ja. - - - - -	17.4		Ay. 64 - - - - -	55.2
	Sm. - - - - -	17.3		Main - - - - -	56.5
	Ad. - - - - -	17.6		Ay. 71 - - - - -	55.6
5000	Rü. - - - - -	33 33 12.2 ₁		Ad. - - - - -	56.0
	Ja. - - - - -	12.6	5075	Arm. - - - - -	30 44 25.5
	Main - - - - -	12.3		Q. - - - - -	24.8
	Main 71-73 - - - - -	12.8		R. C. ₂ - - - - -	24.9
	Sm. - - - - -	12.9		Main - - - - -	26.7
	Ad. - - - - -	12.7		LeV. - - - - -	25.6
5019	Rü. - - - - -	49 9 51.4		Ad. - - - - -	25.5
	R. C. - - - - -	52.6	5076	Rü. - - - - -	40 1 45.3
	Ja. - - - - -	50.8		H. - - - - -	44.6
	Ay. 60 - - - - -	53.0		R. C. - - - - -	42.8
	Ad. - - - - -	51.9		Ja. - - - - -	43.5
Gr. 2202	R. C. - - - - -	49 2 52.8		Ad. - - - - -	44.0
	Ay. 45 - - - - -	52.3 ₁	5077	Ay. - - - - -	52 47 30.7
	Ay. 60 - - - - -	53.0		R. C. - - - - -	30.2
	Ad. - - - - -	52.9		Ja. - - - - -	29.4
5026	Rü. - - - - -	38 44 1.8		Ad. - - - - -	30.1
	R. C. - - - - -	3.1	Gr. 2227	T. - - - - -	37 47 15.0
	Ja. - - - - -	3.3		Rü. - - - - -	14.5
	Ay. 64 - - - - -	2.0		R. C. - - - - -	16.0
	Ad. - - - - -	2.7		Ay. 45 - - - - -	15.5 ₂
5033	Ay. - - - - -	42 38 15.5		Ay. 50 - - - - -	14.6
	R. C. - - - - -	16.1		Arm. - - - - -	12.9
	Ja. - - - - -	14.4		Ja. - - - - -	14.4
	Wn. - - - - -	15.2		Yarn. - - - - -	14.3
	Ad. - - - - -	15.3		Ad. - - - - -	14.6
5036	St. - - - - -	33 46 56.5	5092	Ay. 40 - - - - -	47 30 8.3
	R. C. ₂ - - - - -	55.8		R. C. - - - - -	7.2
	Ay. 64 - - - - -	56.2		Ja. - - - - -	9.1
	Ay. 69 - - - - -	55.8		Ad. - - - - -	8.2
	Ay. 73 - - - - -	56.4	XV, 81	T. - - - - -	34 46 17.8
	Main 72 - - - - -	55.6		Arm. - - - - -	18.6
	Yarn. - - - - -	56.7		H. - - - - -	17.2
	Ad. - - - - -	56.4		Pulc. - - - - -	18.4
XV, 39	T. - - - - -	51 24 6.9	Gr. 2232	Ad. - - - - -	18.0
	R. C. - - - - -	6.8		R. C. - - - - -	44 44 25.3
	Arm. - - - - -	5.5		Rü. - - - - -	25.5
	Bonn. - - - - -	7.3		Yarn. - - - - -	25.9 ₂
	Ad. - - - - -	6.5		Bonn. - - - - -	26.8 ₁
				Ad. - - - - -	25.8

Gr. 2202. P. M. + 0".06 from Gr.
 Gr. 2227. P. M. + 0".17; c. — o: Pi. — 1".4; Gr. + 0".8.
 5092. Declination doubtful.

DETAILS OF POSITIONS—DIVISION IV.

145

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
5097	St. - - - - -	59 24 16.6	5177	T. - - - - -	47 12 39.2
	Nyr6n - - - - -	16.1		H. - - - - -	38.5
	Leid. - - - - -	16.7		R. C. - - - - -	37.2
	Eng. - - - - -	15.6		Arm. - - - - -	36.6
	Main - - - - -	16.0		R. C. ₂ - - - - -	37.3
	Ay. 72 - - - - -	16.6		Wn. 67 - - - - -	38.3
	Ad. - - - - -	16.3		Ad. - - - - -	38.0
Gr. 2237	Rii. - - - - -	39 9 23.2	Gr. 2260	R. C. - - - - -	54 55 8.2
	R. C. - - - - -	23.3		Pulc. - - - - -	8.7
	Ay. 45 - - - - -	23.7		H. - - - - -	7.9
	Yarn. - - - - -	23.0 ₂		Ad. - - - - -	8.3
	Ad. - - - - -	23.5	5178	St. - - - - -	37 2 33.3
5113	Rii. - - - - -	48 8 35.2		Yarn. - - - - -	32.5
	R. C. - - - - -	36.0		R. C. ₂ - - - - -	33.4
	Ja. - - - - -	35.2		Main - - - - -	34.0
	Ad. - - - - -	35.5		Ay. 69 - - - - -	32.9
				Ad. - - - - -	33.2
Arg. 167	Arg. - - - - -	57 52 9.0	5181	H. - - - - -	50 49 54.4
5122	Pulc. V. C. - - - - -	41 15 35.8		R. C. - - - - -	55.3
	Pulc. M. C. - - - - -	36.4		Ja. - - - - -	[52.0]
	Ay. 60 - - - - -	37.0		On. - - - - -	54.4
	Yarn. - - - - -	35.7		Wn. - - - - -	53.8
	Pulc. V. C. - - - - -	35.9		Ad. - - - - -	54.5
	Ad. - - - - -	36.1	5204	Pulc. - - - - -	32 54 40.5
5130	Pulc. V. C. - - - - -	41 19 28.2		Arm. - - - - -	42.3
	Pulc. M. C. - - - - -	28.0		Ay. 60 - - - - -	42.6
	Yarn. - - - - -	26.7		Ay. 64 - - - - -	41.9
	Ay. 60 - - - - -	28.5		Main - - - - -	41.4
	Ad. - - - - -	27.9		Ad. - - - - -	41.8
5131	Pulc. V. C. - - - - -	31 46 56.4	5210	Ay. 40 - - - - -	52 45 21.2
	Ay. 60 - - - - -	56.9		H. - - - - -	22.7
	Ad. - - - - -	56.7		Ay. 45 - - - - -	22.5
5155	Arm. - - - - -	39 25 34.2		R. C. - - - - -	21.6
	Yarn. - - - - -	33.8		Pulc. - - - - -	22.6
	Ay. 60 - - - - -	34.4		Leid. - - - - -	21.7
	Wn. 72 - - - - -	35.0		Ay. 70 - - - - -	22.5
	Ad. - - - - -	34.4		Ad. - - - - -	21.9
5157	R. C. - - - - -	43 34 56.8	R. C. 3453	H. - - - - -	55 51 28.8
	Ja. - - - - -	55.1		R. C. - - - - -	27.7
	Ay. 64 - - - - -	56.9		Ad. - - - - -	28.3
	Kön. - - - - -	57.8	5248	H. - - - - -	55 45 36.9
	Wn. - - - - -	56.5		R. C. - - - - -	35.8
	Ad. - - - - -	56.6		Arm. - - - - -	35.5
				Ja. - - - - -	36.0
				Ad. - - - - -	36.0
5164	Ay. 45 - - - - -	50 6 51.4	5259	Pulc. - - - - -	36 2 45.5
	R. C. - - - - -	51.0		Arm. - - - - -	44.8 ₁
	Ja. - - - - -	50.9		Q. - - - - -	46.6
	Ad. - - - - -	51.1		Ay. 60 - - - - -	46.5
R. C. 3416	R. C. - - - - -	40 12 54.2		R. C. ₂ - - - - -	47.4
	Wn. - - - - -	53.8		Wn. - - - - -	47.7 ₁
	Ad. - - - - -	54.0		Ad. - - - - -	46.4
5168	St. - - - - -	40 45 42.2	5271	See Introduction, p. 13.	
	Pulc. - - - - -	40.5	5279	H. - - - - -	56 11 48.5
	Ad. - - - - -	41.3		Ay. 45 - - - - -	49.1
5175	Ay. 45 - - - - -	44 0 45.0		R. C. - - - - -	49.3
	R. C. - - - - -	44.8		Ay. 50 - - - - -	49.2
	Ja. - - - - -	45.1		Ja. - - - - -	[46.3]
	Wn. 72 - - - - -	45.5		Wn. 72 - - - - -	48.3
	Ad. - - - - -	45.1		Ad. - - - - -	48.9

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
5287	Pulc. - - - - -	43 30 12.5	5338	Arm. - - - - -	46 23 4.1
	R. C. - - - - -	13.3		Ay. 60 - - - - -	4.7
	Arm. - - - - -	[9.8 ₂]		Bonn. - - - - -	4.3 ₁
	R. C. ₂ - - - - -	12.6		Wn. 72 - - - - -	4.2
	Yarn. - - - - -	11.3		Main - - - - -	3.8
	Ad. - - - - -	12.4		Ad. - - - - -	4.3
5295	Pulc. - - - - -	38 18 32.1	5341	R. C. - - - - -	53 15 49.0
	Arm. - - - - -	32.3		Ja. - - - - -	48.2
	Yarn. - - - - -	33.0		Ad. - - - - -	48.7
	Ay. 64 - - - - -	32.2	5348	St. - - - - -	58 53 58.6
	Ad. - - - - -	32.4		R. C. ₂ - - - - -	58.3
5298	Ay. 12-yr. - - - - -	42 55 49.9		Oom. - - - - -	58.4
	R. C. - - - - -	50.4		Ay. 69 - - - - -	58.6
	Arm. - - - - -	51.5		Leid. - - - - -	58.5
	Pulc. - - - - -	50.6		Paris - - - - -	58.9
	Yarn. - - - - -	49.7		Ay. 72-3 - - - - -	59.0
	Ad. - - - - -	50.4		Ad. - - - - -	58.6
5307	R. C. - - - - -	59 16 22.4	5385	Arm. - - - - -	36 48 34.1
	Ja. - - - - -	20.4		Q. - - - - -	34.7
	Oom. - - - - -	21.7		Ay. 60 - - - - -	35.0
	LeV. - - - - -	21.7		R. C. ₂ - - - - -	34.3
	Wn. - - - - -	22.1		Ay. 64 - - - - -	34.7
	Ad. - - - - -	21.7		Paris - - - - -	34.9
5310	T. - - - - -	36 59 57.9		Ay. 69 - - - - -	34.7
	H. - - - - -	58.3		Ay. 72 - - - - -	35.7
	Arm. - - - - -	58.1		Yarn. - - - - -	34.5
	Ay. 64 - - - - -	58.6		Ad. - - - - -	34.7
	Main - - - - -	58.8	5388	St. - - - - -	45 15 49.0
	Yarn. - - - - -	58.5 ₂		R. C. - - - - -	48.4
	Main 71 - - - - -	57.8		Main - - - - -	48.4
	Wn. 72 - - - - -	58.5 ₂		Ad. - - - - -	48.8
	Ad. - - - - -	58.3	5400	Arm. - - - - -	44 9 12.6
5313	St. - - - - -	55 6 12.8		R. C. ₂ - - - - -	12.5
	Pulc. - - - - -	12.7		Wn. - - - - -	13.2
	Ad. - - - - -	12.7		Ad. - - - - -	12.7
5316	R. C. - - - - -	50 14 18.3	5415	R. C. - - - - -	58 15 50.2
	Ja. - - - - -	[16.3]		Sta. - - - - -	51.4
	On. - - - - -	19.2		Sm. 72 - - - - -	50.2
	Ad. - - - - -	18.8		Main - - - - -	49.3
5319	Arm. - - - - -	33 40 54.2		Ad. - - - - -	50.3
	Ay. 60 - - - - -	54.8	5411	T. - - - - -	36 44 56.8
	R. C. ₂ - - - - -	53.9		H. - - - - -	57.5
	Ay. 64 - - - - -	54.6		Arm. - - - - -	56.3
	Ay. 68 - - - - -	53.7		Main - - - - -	57.5
	Ay. 71 - - - - -	54.2		Ay. 72-3 - - - - -	56.0
	Ad. - - - - -	54.3		Ad. - - - - -	56.5
5321	Arm. - - - - -	30 12 7.7	5417	R. C. - - - - -	42 41 45.2
	Main - - - - -	7.3		Ja. - - - - -	45.0
	Wn. - - - - -	7.1		LeV. - - - - -	44.6
	Main 71 - - - - -	7.2		Ad. - - - - -	44.9
	Ad. - - - - -	7.3	5432	Arm. - - - - -	34 10 35.9
5336	T. - - - - -	36 58 38.9		Q. - - - - -	34.8
	H. - - - - -	40.4		R. C. ₂ - - - - -	34.8
	Arm. - - - - -	39.8		Main - - - - -	35.0
	Ay. 64 - - - - -	39.3		LeV. - - - - -	34.0
	Main - - - - -	40.2	Gr. 2325	Ay. 72-3 - - - - -	36.0 ₂
	Yarn. - - - - -	40.7		Ad. - - - - -	34.9
	Ay. 72 - - - - -	40.4 ₁		T. - - - - -	53 32 55.3
	Ad. - - - - -	40.0		Arm. - - - - -	54.1
				R. C. - - - - -	53.8
				Yarn. - - - - -	54.3
				Ad. - - - - -	54.3

Gr. 2325. I think the southerly motion indicated is genuine.

5415. Two additional observations of Main give 53^h 0^m; with them I should adopt 50^h 7^m.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
5460	H. - - - - -	40 0 32.7	5523	Pule - - - - -	42 9 23.7
	R. C. - - - - -	31.9		12-yr. - - - - -	29.2
	Ja. - - - - -	30.1		Ay. 60 - - - - -	29.4
	Yarn. - - - - -	30.7		Yarn. - - - - -	27.8
	Ad. - - - - -	31.4		Ad. - - - - -	28.8
5461	R. C. - - - - -	49 20 16.3	Gr. 2351	R. C. - - - - -	51 40 54.0
	Ja. - - - - -	16.7		Pule. - - - - -	55.4
	Wn. - - - - -	16.4		H. - - - - -	55.3
	Ad. - - - - -	16.5		Ad. - - - - -	54.9
5463	St. - - - - -	46 36 43.0	5535	T. - - - - -	49 14 3.6
	Ay. 64 - - - - -	43.2		R. C. - - - - -	3.3
	Ay. 68 - - - - -	41.4		Arm. - - - - -	4.2
	Ay. 70 - - - - -	42.9		Ad. - - - - -	3.7
	Ad. - - - - -	42.8	Gr. 2354	Arg. - - - - -	48 13 56.9
5473	Arm. - - - - -	31 11 1.2		Ad. - - - - -	56.9
	Ay. 60 - - - - -	0.8	5534	Pule. - - - - -	33 46 58.6
	Ay. 69 - - - - -	0.2		Yarn. - - - - -	56.5
	Wn. 72 - - - - -	0.3		Ay. 64 - - - - -	57.8
	Ad. - - - - -	0.6		Main - - - - -	59.4
5479	T. - - - - -	34 5 39.4		Ad. - - - - -	58.1
	Ay. 45 - - - - -	41.0	5541	Arm. - - - - -	30 45 44.0
	Ay. 60 - - - - -	40.6		Ay. 64 - - - - -	44.1
	Ad. - - - - -	40.4		Yarn. - - - - -	43.7
5480	T. - - - - -	33 59 44.2		Main - - - - -	45.2
	Ay. 45 - - - - -	44.6		Ay. 72 - - - - -	45.4
	Arm. - - - - -	43.7		Ad. - - - - -	44.6
	Ad. - - - - -	44.2	5546	T. - - - - -	38 20 58.3
5484	Arm. - - - - -	32 37 34.5		H. - - - - -	58.3
	Q. - - - - -	34.3		R. C. - - - - -	58.8
	Ay. 60 - - - - -	32.9		Arm. - - - - -	59.3
	Ay. 64 - - - - -	33.1		Yarn. - - - - -	57.6
	Main - - - - -	34.2		Ad. - - - - -	58.5
	Wn. - - - - -	33.3	5549	Rü. - - - - -	50 24 19.3
	Ad. - - - - -	33.7		R. C. - - - - -	21.3
5496	Arm. - - - - -	37 40 47.2		Ja. - - - - -	18.9
	Ay. 60 - - - - -	47.3		On. - - - - -	20.7
	Ay. 64-71 - - - - -	47.3		Yarn. - - - - -	18.4
	Ad. - - - - -	47.3		LeV. - - - - -	20.5
5497	Ay. 40 - - - - -	44 58 33.5		Ad. - - - - -	19.9
	R. C. - - - - -	34.6	5552	St. - - - - -	42 41 45.1
	Ja. - - - - -	32.7		Ay. 69 - - - - -	45.5
	Ad. - - - - -	33.6		Leid. - - - - -	45.3
5499	R. C. - - - - -	52 34 29.6		Eng. - - - - -	45.1
	Ja. - - - - -	30.5		Main - - - - -	45.1
	Ad. - - - - -	30.0		Ad. - - - - -	45.2
5502	St. - - - - -	55 29 23.1	5559	R. C. - - - - -	52 29 50.6
	Ay. 68 - - - - -	24.2		Ja. - - - - -	49.9
	Pule. - - - - -	24.2		Ad. - - - - -	50.3
	Ad. - - - - -	23.8	5568	H. - - - - -	46 52 2.1
5503	R. C. - - - - -	52 0 1.7		R. C. - - - - -	1.7
	Ja. - - - - -	1.5		Ja. - - - - -	51 59.5
	Wn. 72 - - - - -	1.3		Ad. - - - - -	52 1.1
	Ad. - - - - -	1.5	5574	Arm. - - - - -	53 9 8.0
5515	T. - - - - -	32 58 44.5		Paris - - - - -	7.7
	Arm. - - - - -	43.4		Ay. 69 - - - - -	7.5
	Ay. 64 - - - - -	42.6		Leid. - - - - -	7.3
	Main - - - - -	43.6		Eng. - - - - -	7.3
	Ad. - - - - -	43.5		Wn. 72 - - - - -	6.8
				Ad. - - - - -	7.4

5497. The value on page 25 includes later observations.

5535. Withont P. M. as in L. S. C. The star needs reobservation.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
5575	Arm. - - - - -	53 10 35.4	5658	T. - - - - -	55 37 56.1
	Ay. 69 - - - - -	35.0		H. - - - - -	55.4
	Main 71 - - - - -	36.1		R. C. - - - - -	56.0
	Wn. 72 - - - - -	34.8		R. C. ₂ - - - - -	55.3
	Ad. - - - - -	35.2		Ad. - - - - -	55.7
5596	Arm. - - - - -	49 10 25.1	5652	Arm. - - - - -	30 10 50.8
	Ay. 60 - - - - -	25.1		Pulc. - - - - -	48.1
	Yarn. - - - - -	24.3		Ay. 64 - - - - -	49.4
	Mn. - - - - -	23.8		Main - - - - -	48.3
	Ad. - - - - -	24.6		Wn. 72 - - - - -	49.8
				Ad. - - - - -	49.3
5599	Ay. 45 - - - - -	56 15 38.0	5667	12-yr. - - - - -	46 12 7.4
	H. - - - - -	38.8		Pulc. - - - - -	7.2
	R. C. - - - - -	39.0		R. C. - - - - -	6.5
	Ja. - - - - -	38.5		Arm. - - - - -	6.7 ₁
	Ad. - - - - -	38.6		Ay. 60 - - - - -	7.3
				Ad. - - - - -	7.1
5604	St. - - - - -	31 49 49.9	5666	Arm. - - - - -	30 1 16.2
	R. C. ₂ - - - - -	50.2		Ay. 60 - - - - -	16.7
	Ay. 64 - - - - -	49.5		Yarn. - - - - -	16.0
	Ay. 69 - - - - -	49.9		Wn. 72 - - - - -	16.5
	Eng. - - - - -	49.2		Ay. 72 - - - - -	15.9
	Arg. - - - - -	50.2		Ay. 73 - - - - -	15.4
	Leid. - - - - -	50.4		Ad. - - - - -	16.1
	Main - - - - -	50.7			
	Ay. 72 - - - - -	49.5	5693	Yarn. - - - - -	31 54 34.0
	Ad. - - - - -	49.9		Ay. 60 - - - - -	35.5
5615	H. - - - - -	36 44 42.7		LeV. 64 - - - - -	36.3
	Ja. - - - - -	41.5		Ay. 72 - - - - -	35.8
	Ay. 64 - - - - -	41.7		Ad. - - - - -	35.2
	Sm. - - - - -	42.9	Gr. 2389	Arg. - - - - -	43 2 28.5
	Yarn. - - - - -	40.8		Ad. - - - - -	28.5
	Main - - - - -	42.4	5706	T. - - - - -	46 44 32.0
	Kön. - - - - -	44.8		H. - - - - -	32.9
	Ad. - - - - -	42.3		R. C. - - - - -	32.5
5619	T. - - - - -	34 16 14.0		Arm. - - - - -	31.9
	H. - - - - -	13.9		Arg. - - - - -	32.9
	Pulc. - - - - -	13.4		Yarn. - - - - -	30.6
	Yarn. - - - - -	11.5		Ad. - - - - -	32.1
	Main - - - - -	13.6	5731	St. - - - - -	31 6 42.2
	Ad. - - - - -	13.2		R. C. ₂ - - - - -	41.7
5629	Ay. 45 - - - - -	55 55 14.4		Ay. 64 - - - - -	42.6
	R. C. - - - - -	14.2		Ay. 69 - - - - -	42.0
	Ay. 50 - - - - -	15.6 ₂		Ay. 72 - - - - -	42.1
	Ja. - - - - -	13.8		Main - - - - -	42.5
	Ad. - - - - -	14.4		Ad. - - - - -	42.2
5643	St. - - - - -	57 0 20.9	5752	Gauss - - - - -	56 52 20.5
	Eng. - - - - -	20.4		Ca. - - - - -	21.4
	Main - - - - -	20.8		T. - - - - -	21.9
	Ay. 68 - - - - -	21.2		Ay. 45 - - - - -	21.5
	Pulc. - - - - -	20.5		R. C. - - - - -	22.0
	Ad. - - - - -	20.8		R. C. ₂ - - - - -	21.3
R.C.3604	T. - - - - -	55 32 23.9		Wn. - - - - -	21.2
=XVI 213	R. C. - - - - -	26.3		Wn. 72 - - - - -	22.2
	R. C. ₂ - - - - -	25.2		Ad. - - - - -	21.5
	Q. - - - - -	26.2	5763	Arm. - - - - -	35 35 20.7
	Ad. - - - - -	25.4		R. C. ₂ - - - - -	29.9
5644	R. C. - - - - -	42 27 45.9		Q. - - - - -	32.0
	Ja. - - - - -	45.2		Ad. - - - - -	30.5
	Ay. 64 - - - - -	45.1			
	Ad. - - - - -	45.4			

5619. P. M. + 0''.06; c. — o.: Pi. + 0''.9.

5629. P. M. + 0''.09 from Gr., confirmed by observations in 1874 and 1875 at Washington.

R. C. 3604. P. M. — 0''.09 from Pi.

5658. Later observations indicate a correction of — 1''.

5731. Earlier observations of Main give 43''.4.

5752. The P. M. + 0''.02 agrees with Groombridge, but Piazz is 9'' or 10'' too far south. I have re-reduced his declination and find 56° 59' 10''.5 for 1800.0 instead of 56° 59' 1''.5. See the note to No. 400 of the Åbo catalogue.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
Arg. 185	Arg. - - - - -	47 13 47.8	5842	Pulc. - - - - -	33 14 9.4
	Ad. - - - - -	47.8		Wn. 72 - - - - -	10.1
5775	T. - - - - -	43 58 59.2		Ay. 72 - - - - -	10.1 ₂
	Ay. 40 - - - - -	59.6		Ay. 73 - - - - -	10.1
	R. C. - - - - -	59.7		Ad. - - - - -	9.9
	Yarn. - - - - -	57.5	5847	Arm. - - - - -	37 25 24.2
	Q. - - - - -	58.8 ₂		Q. - - - - -	26.4
	Ad. - - - - -	59.0		Ay. 60 - - - - -	25.4
5776	Gauss - - - - -	48 58 36.7		R. C. ₂ - - - - -	24.0
	Hausen - - - - -	38.0 ₁		Ay. 64 - - - - -	24.9 ₂
	T. - - - - -	36.8		Wn. - - - - -	24.4
	Arm. - - - - -	37.8		Main 70 - - - - -	24.4
	H. - - - - -	37.0		Main 72 - - - - -	23.2
	R. C. - - - - -	36.2		Ad. - - - - -	24.6
	Sm. 59 - - - - -	38.0	5853	T. - - - - -	49 49 [31.3]
	Sm. 66 - - - - -	38.1		H. - - - - -	33.3
	Ad. - - - - -	37.3		R. C. - - - - -	34.1
5777	Pulc. - - - - -	35 29 26.3		R. C. ₂ - - - - -	32.9
	Ja. - - - - -	26.5		Wn. 72 - - - - -	33.7
	Main - - - - -	27.1		Ad. - - - - -	33.6
	Sm. - - - - -	26.8	Gr. 2431	R. C. - - - - -	38 56 25.5
	Ad. - - - - -	26.5		Pulc. - - - - -	26.4
5785	Ay. 69 - - - - -	54 38 8.3		H. - - - - -	27.2
	Leid. - - - - -	8.1		Ad. - - - - -	26.4
	Eng. - - - - -	7.6	5863	Arm. - - - - -	32 37 47.6
	Ad. - - - - -	8.0		Q. - - - - -	46.5
5788	T. - - - - -	36 5 55.5		R. C. ₂ - - - - -	48.3
	Ay. 60 - - - - -	55.5		Ay. 64 - - - - -	46.4
	Ay. 64 - - - - -	55.8 ₂		Wn. - - - - -	47.0
	Yarn. - - - - -	55.4		Wn. 72 - - - - -	47.7
	Ay. 71 - - - - -	55.4		Paris - - - - -	48.2
	Ay. 73 - - - - -	55.7		Ad. - - - - -	47.5
	Ad. - - - - -	55.5	5871	Arm. - - - - -	46 21 50.9
5790	St. - - - - -	40 40 50.5		Pulc. - - - - -	51.9
	Pulc. - - - - -	49.1		Ay. 69 - - - - -	51.7
	Ad. - - - - -	49.8		Leid. - - - - -	51.1
5797	T. - - - - -	58 25 56.0		Eng. - - - - -	51.3
	H. - - - - -	55.5		Wn. - - - - -	51.8
	R. C. - - - - -	57.0		Ad. - - - - -	51.4
	Arm. - - - - -	55.8	5874	H. - - - - -	40 5 54.2
	R. C. ₂ - - - - -	55.9		R. C. - - - - -	53.1
	Wn. 72 - - - - -	56.6		Ja. - - - - -	52.6
	Ad. - - - - -	56.1		Ay. 64 - - - - -	54.4
5795	T. - - - - -	51 0 4.8		Wn. - - - - -	55.1
	R. C. - - - - -	6.5		Ad. - - - - -	53.9
	Yarn. - - - - -	3.5	5886	Pulc. - - - - -	37 15 43.4
	Wn. - - - - -	5.2		Q. - - - - -	44.1
	Ad. - - - - -	5.0		Yarn. - - - - -	42.3
5801	Åbo and Dorpat - - - - -	55 55 37.5		Leid. - - - - -	42.9
	T. - - - - -	36.4		Eng. - - - - -	43.9
	H. - - - - -	37.8		Ay. 69 - - - - -	43.5
	R. C. - - - - -	37.7		Ay. 70 - - - - -	44.2
	Wn. - - - - -	38.7		Main 70 - - - - -	43.3
	Pulc. - - - - -	38.8		Ad. - - - - -	43.4
	Ad. - - - - -	37.8	Gr. 2136	R. C. - - - - -	38 41 47.1
5834	St. - - - - -	36 57 4.8		Pulc. - - - - -	48.1
	Ay. 69 - - - - -	3.7		H. - - - - -	49.5
	Leid. - - - - -	3.6		Yarn. - - - - -	48.1
	Eng. - - - - -	4.3		Ad. - - - - -	48.2
	Ay. 72 - - - - -	4.3			
	Ad. - - - - -	4.1			

5776. P. M. used, — 0".10; c. — o.: (Pi.) — 1".5.
Gr. 2431. P. M. + 0".07 from Gr.

No.	Authority.	Declination.			No.	Authority.	Declination.		
		°	'	"			°	'	"
5895	Pule. - - - - -	37	3	50.3	5986	T. - - - - -	31	16	10.5
	Yarn. - - - - -			49.6		Rü. - - - - -			12.1
	Ja. - - - - -			50.6		Il. - - - - -			11.6
	R. C. ₂ - - - - -			49.7		Arm. - - - - -			10.2
	Ay. 64 - - - - -			51.0		Ay. 64 - - - - -			11.4
	Wn. 72 - - - - -			51.9		Main - - - - -			9.9
	Ad. - - - - -			50.6		Main 71 - - - - -			11.7
5902	T. - - - - -	57	7	31.4		Ay. 73 - - - - -			11.7
	H. - - - - -			30.3		Ad. - - - - -			11.2
	R. C. - - - - -			31.5	5990	St. - - - - -	46	4	25.2
	Ad. - - - - -			31.1		R. C. ₂ - - - - -			26.2
5911	Pule. - - - - -	48	21	57.1		Yarn. - - - - -			24.9
	St. - - - - -			56.3		Ay. 73 - - - - -			25.5
	Ad. - - - - -			56.9		Ad. - - - - -			25.4
5918	T. - - - - -	58	45	24.1	5997	Rü. - - - - -	43	31	62.5 ₁
	H. - - - - -			23.6		R. C. - - - - -			58.6
	R. C. - - - - -			24.3		Ja. - - - - -			55.8
	Arm. - - - - -			24.0		Ad. - - - - -			58.4
	Oom. - - - - -			24.0	6013	R. - - - - -	44	8	23.7
	Ad. - - - - -			24.0		R. C. - - - - -			23.3
5927	T. - - - - -	31	15	8.7		Ja. - - - - -			24.0
	H. - - - - -			9.1		Ad. - - - - -			23.7
	Arm. - - - - -			8.7	Gr. 2464	R. C. - - - - -	38	55	54.6
	Main - - - - -			9.8		Pule. - - - - -			54.2
	Ad. - - - - -			9.1		H. - - - - -			56.1 ₁
5929	R. C. - - - - -	38	58	35.6		Ad. - - - - -			54.7
	Ja. - - - - -			35.7	6036	H. - - - - -	47	39	22.8
	Yarn. - - - - -			35.8		R. C. - - - - -			21.8
	Ad. - - - - -			35.7		Ja. - - - - -			22.3
5944	H. - - - - -	41	19	58.5		Ad. - - - - -			22.3
	R. C. - - - - -			58.4	6052	Pule. - - - - -	50	48	41.6
	Ja. - - - - -			58.5		Arm. - - - - -			40.3
	Ay. 60 - - - - -			58.1 ₁		R. C. ₂ - - - - -			41.4
	Ay. 64 - - - - -			58.1		Yarn. - - - - -			41.7 ₂
	Ay. 69 - - - - -			58.6	6056	Ad. - - - - -			41.3
	Wn. - - - - -			58.2		R. C. - - - - -	48	25	43.6
	Ad. - - - - -			58.4		Arm. - - - - -			43.6
						Ay. 64 - - - - -			43.3
5950	St. - - - - -	55	16	13.0		Wn. - - - - -			43.4
	R. C. ₂ - - - - -			11.2	Gr. 2473	Ad. - - - - -			43.5
	Yarn. - - - - -			12.7		T. - - - - -	40	6	16.9
	Ad. - - - - -			12.5		R. - - - - -			16.9
5951	Pule. - - - - -	55	15	31.5		R. C. - - - - -			16.8
	St. - - - - -			31.2		Pule. - - - - -			17.5
	R. C. ₂ - - - - -			30.4		Arm. - - - - -			18.6
	Yarn. - - - - -			31.2		Ad. - - - - -			17.3
	Ad. - - - - -			31.1	6062	H. - - - - -	40	0	37.6
5962	T. - - - - -	30	51	48.5		Arm. - - - - -			37.7 ₂
	H. - - - - -			50.1		Yarn. - - - - -			36.9
	Arm. - - - - -			49.7		Ay. 72 - - - - -			37.8
	Yarn. - - - - -			47.6		Ad. - - - - -			37.5
	Paris - - - - -			48.0	Gr. 2481	R. C. - - - - -	46	40	35.5
	Main - - - - -			49.8		Pule. - - - - -			36.5
	Wn. 71-72 - - - - -			48.9		H. - - - - -			36.6
	Ay. 73 - - - - -			48.5		Ad. - - - - -			36.2
	Ad. - - - - -			48.9	6068	Pule. - - - - -	40	1	57.6
5975	Pule. - - - - -	48	39	33.7		Arm. - - - - -			75.4
	Arm. - - - - -			33.4		Ay. 64 - - - - -			56.9
	Ay. 64 - - - - -			32.9 ₃		Paris - - - - -			58.6
	Yarn. - - - - -			33.2 ₁		Ad. - - - - -			57.6
	Ad. - - - - -			33.3					

Gr. 2481. P. M. — 0".16 from Gr. confirmed by Lalande.
 5997. Very ill-determined.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
6079	St. - - - - -	56 53 34.5	6162	R. C. - - - - -	43 26 51.2
	R. C. ₂ - - - - -	33.8		Arm. - - - - -	52.4
	Main 71 - - - - -	33.4		Ja. - - - - -	50.8
	Wn. 72 - - - - -	34.2		Ad. - - - - -	51.5
	Ad. - - - - -	34.1			
6082	St. - - - - -	37 16 6.0	Rü. 6308	Pule. - - - - -	33 25 3.6
	Main - - - - -	5.6		Rü. - - - - -	5.1
	Ad. - - - - -	5.8		H. - - - - -	4.6
				Ad. - - - - -	4.4
6087	Arm. - - - - -	30 12 4.4	6178	Arm. - - - - -	31 22 32.1
	Ay. 60 - - - - -	3.1		Ay. 60 - - - - -	31.6
	Ay. 68 - - - - -	3.5 ₁		Ay. 64 - - - - -	31.8
	Yarn. - - - - -	2.9		Yarn. - - - - -	31.4
	Main 72 - - - - -	3.7		Paris - - - - -	32.3
	Ad. - - - - -	3.5		Ay. 71-73 - - - - -	31.8
				Ad. - - - - -	31.8
6095	R. C. - - - - -	43 25 45.9	6184	R. C. - - - - -	56 14 19.8
	Ja. - - - - -	47.0		Ja. - - - - -	19.3
	Ad. - - - - -	46.4		Ad. - - - - -	19.6
Gr. 2494	R. C. - - - - -	45 29 4.3	6185	H. - - - - -	54 14 59.7
	Pule. - - - - -	3.7		R. C. - - - - -	58.2
	H. - - - - -	4.8		Arm. - - - - -	58.4
	Ad. - - - - -	4.3		Ay. 45 - - - - -	58.9
XVII, 347	T. - - - - -	33 13 9.5		Ja. - - - - -	[59.6]
	H. - - - - -	11.7		R. C. ₂ - - - - -	58.2
	Pule. - - - - -	10.7		Wn. - - - - -	59.2
	Ad. - - - - -	10.6		Ad. - - - - -	59.0
6109	T. - - - - -	45 30 28.5	6193	Rü. - - - - -	38 44 21.8
	H. - - - - -	29.1		R. C. - - - - -	22.9
	R. C. - - - - -	30.0		Ja. - - - - -	23.1
	Wn. - - - - -	28.8		Wn. - - - - -	23.0
	Ad. - - - - -	29.1		Yarn. - - - - -	23.9 ₁
R.C. 3820	R. C. - - - - -	48 28 0.9		Ay. 70 - - - - -	22.7 ₂
	Ay. 50 - - - - -	1.1 ₁		Ad. - - - - -	22.8
	Ad. - - - - -	1.0	Gr. 2536	R. C. - - - - -	49 6 51.8
6129	Rü. - - - - -	48 27 33.7		Rü. - - - - -	50.0
	Ay. 45 - - - - -	33.3		Ay. 60 - - - - -	52.0
	H. - - - - -	32.9		Ad. - - - - -	51.3
	R. C. - - - - -	33.4	6203	St. - - - - -	42 7 3.7
	On. - - - - -	33.7		Ay. 67-72 - - - - -	3.8
	Ja. - - - - -	32.9		Pule. - - - - -	3.7
	Ay. 60 - - - - -	33.1		Ad. - - - - -	3.7
	Main - - - - -	34.2	6216	Rü. - - - - -	56 32 44.6
	Ad. - - - - -	33.3		Ay. 45 - - - - -	44.5
Rü. 6227	R. - - - - -	46 25 59.6 ₁		R. C. - - - - -	45.5
	A. Ö. - - - - -	26 1.1 ₁		Ay. 50 - - - - -	45.5
	H. C. - - - - -	3.2		Ja. - - - - -	45.2
	Ad. - - - - -	1.6		Ad. - - - - -	45.1
6147	Arm. - - - - -	30 32 43.8	6218	Ay. 45 - - - - -	40 53 18.0
	Q. - - - - -	43.9		H. - - - - -	18.8
	Y. - - - - -	42.2		R. C. - - - - -	19.4
	Ay. 64 - - - - -	42.6		Arm. - - - - -	17.3
	Paris - - - - -	42.8		Ja. - - - - -	19.6
	Main - - - - -	44.0		Ay. 60 - - - - -	18.1
	Main 71 - - - - -	42.2		Ad. - - - - -	18.5
	Ad. - - - - -	43.1	6235	Arm. - - - - -	36 0 32.8
Rü. 62	Rü. - - - - -	46 15 31.7 ₁		Yarn. - - - - -	32.9
	A. Ö. - - - - -	33.2 ₁		Ay. 60 - - - - -	32.7
	H. C. - - - - -	31.2		Ay. 72 - - - - -	34.3
	Ad. - - - - -	31.8		Ad. - - - - -	33.2

Gr. 2494. P. M. + 0".06 from Gr.

R. C. 3820. Main gives 1".4 (6 obs.)

6162. Later observations at Washington disagree about — 4" from this declination. Under any circumstances Armagh and Washington cannot be reconciled; the formula $43^{\circ} 26' 43''.6 - 0''.05 (t - 1875)$ is approximately correct if Armagh be rejected.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
6246	Ay. 45 - - - - -	51 17 38.2	6335	R. C. - - - - -	52 1 21.0
	R. C. - - - - -	39.1		Arm. - - - - -	19.6
	Ja. - - - - -	38.3		Ja. - - - - -	21.0
	On. - - - - -	38.3		On. - - - - -	20.6
	Ad. - - - - -	38.5		LeV. - - - - -	20.6
				Ad. - - - - -	20.6
6252	R. - - - - -	49 39 53.3	Gr. 2603	T. - - - - -	46 7 19.2
	R. C. - - - - -	55.5		R. C. - - - - -	17.7
	Ja. - - - - -	54.9		Arm. - - - - -	18.6
	Seeberg - - - - -	55.0		Ad. - - - - -	18.5
	Ad. - - - - -	54.7			
6255	Ay. 45 - - - - -	49 3 34.0	6348	Ay. 40 - - - - -	56 57 1.1
	H. - - - - -	33.3		Ay. 45 - - - - -	0.6
	R. C. - - - - -	34.1		Arm. - - - - -	1.0
	Arm. - - - - -	33.3		R. C. - - - - -	2.7
	Ja. - - - - -	33.8		Pule. - - - - -	2.2
	On. - - - - -	34.8		Ad. - - - - -	1.5
	Ay. 60 - - - - -	33.8			
	LeV. - - - - -	33.4	6350	H. - - - - -	52 15 19.2
	Seeberg - - - - -	33.4		R. C. - - - - -	18.2
	Ad. - - - - -	33.8		Arm. - - - - -	17.4
				Ja. - - - - -	18.3
6258	Rii. - - - - -	51 14 26.9		Ay. 60 - - - - -	18.1
	Ay. 45 - - - - -	28.0		Main 70 - - - - -	17.4 ₂
	R. C. - - - - -	30.0		Ad. - - - - -	18.1
	Ja. - - - - -	30.5			
	Yarn. - - - - -	27.4	6349	Ay. - - - - -	38 47 38.4
	Ad. - - - - -	28.6		Pule. - - - - -	39.1
				R. C. - - - - -	37.9
6268	Arm. - - - - -	39 26 25.5		Arm. - - - - -	38.4
	Pule. - - - - -	24.8		R. C. ₂ - - - - -	38.2
	Ay. 64 - - - - -	24.0		Ad. - - - - -	38.4
	Ay. 73 - - - - -	24.5	Gr. 2615	R. C. - - - - -	42 57 11.0
	Ad. - - - - -	24.7		Arm. - - - - -	9.5
				Ad. - - - - -	10.2
Gr. 2563	R. C. - - - - -	42 24 1.8	6357	T. - - - - -	39 33 33.1
	Rii. - - - - -	3.5 ₁		H. - - - - -	33.0
	Ay. 60 - - - - -	1.2 ₁		R. C. - - - - -	34.2
	Ay. 64 - - - - -	0.7		Wn. - - - - -	32.0
	Ad. - - - - -	1.6		Ad. - - - - -	33.1
6289	St. - - - - -	58 43 43.9	6364	R. C. - - - - -	40 49 18.3
	LeV. - - - - -	43.0		Arm. - - - - -	17.9
	Pule. - - - - -	43.8		Ja. - - - - -	18.4
	Wn. 72 - - - - -	43.5		Ad. - - - - -	18.2
	Ad. - - - - -	43.6			
6311	R. C. - - - - -	59 37 41.3	6365	T. - - - - -	38 15 8.7
	Arm. - - - - -	38.4		R. C. - - - - -	8.6
	Ja. - - - - -	39.1		Ay. 64 - - - - -	7.8
	Wn. 72 - - - - -	39.3		Yarn. - - - - -	6.6
	Ad. - - - - -	39.5		Wn. 72 - - - - -	7.3
				Ad. - - - - -	7.8
6318	Ay. 45 - - - - -	59 27 57.6	Gr. 2632	T. - - - - -	52 13 50.2
	R. C. - - - - -	57.6		P. M. - - - - -	52.5
	Ja. - - - - -	59.7		Rii. - - - - -	52.6 ₁
	Oom. - - - - -	58.2		Arm. - - - - -	50.8
	Ad. - - - - -	58.3		R. C. - - - - -	52.8
				Ad. - - - - -	51.7
Arg. LXIII	H. - - - - -	30 27 41.2	6368	Arm. - - - - -	55 7 49.8
	Pule. - - - - -	41.2		Pule. - - - - -	49.6
	Bonn. - - - - -	42.6		Ja. - - - - -	48.3
	Ad. - - - - -	41.7		R. C. ₂ - - - - -	48.4
Gr. 2597	R. C. - - - - -	45 40 53.8		Wn. - - - - -	48.6
	Arm. - - - - -	54.9		Ay. 72 - - - - -	49.1 ₁
	Ad. - - - - -	54.4		Ad. - - - - -	49.0

DETAILS OF POSITIONS—DIVISION IV.

153

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
6372	Pi. - - - - -	52 4 45.2	6419	Rh. - - - - -	52 51 5.0
	Gr. - - - - -	44.3		R. C. - - - - -	5.1
	Bessel - - - - -	44.3		Arm. - - - - -	5.7
	T. - - - - -	44.7		Ja. - - - - -	5.6
	Rü. - - - - -	43.2		Ay. 60 - - - - -	4.7
	H. - - - - -	44.9		Eng. 73 - - - - -	4.9
	R. C. - - - - -	43.5		Ad. - - - - -	5.1
	Arm. - - - - -	43.4	6421	R. C. - - - - -	49 17 39.4
	Leid. - - - - -	44.3		Ja. - - - - -	37.7
	Eng. - - - - -	44.4		Ay. 60-64 - - - - -	39.0
	Ay. 72 - - - - -	44.5		Seeberg - - - - -	38.7
	Ad. - - - - -	44.4		Ad. - - - - -	38.7
Gr. 2644	R. C. - - - - -	39 10 32.3	6428	Ay. 45 - - - - -	48 37 32.0
	Rü. - - - - -	32.8		H. - - - - -	32.2
	Arm. - - - - -	33.2 ₁		R. C. - - - - -	32.4
	Ay. 73 - - - - -	33.4		Arm. - - - - -	33.0
	Ad. - - - - -	32.9		Ja. - - - - -	33.1
Gr. 2646	R. C. - - - - -	44 48 7.8		On. - - - - -	32.5
	Rü. - - - - -	10.9	Gr. 2647	Ay. 60 - - - - -	32.5
	Arm. - - - - -	9.7		Ad. - - - - -	32.5
	Ay. 40 - - - - -	6.7		R. C. - - - - -	43 48 33.6
	Ay. 45 - - - - -	7.0		Arm. - - - - -	33.3
	Ay. 50 - - - - -	7.3		Ad. - - - - -	33.5
	Ad. - - - - -	8.2	Gr. 2693	H. - - - - -	41 13 56.9
6390	St. - - - - -	39 32 25.3		Pulc. - - - - -	56.3
	Ay. 69 - - - - -	25.5		Arm. - - - - -	55.4
	Leid. - - - - -	25.0		R. C. - - - - -	56.2
	Eng. - - - - -	25.4		Ad. - - - - -	56.2
	Ad. - - - - -	25.3	6452	H. - - - - -	52 48 50.4
6395	Arm. - - - - -	55 24 46.9		R. C. - - - - -	50.5
	Pulc. - - - - -	48.2		Arm. - - - - -	49.7
	Wn. - - - - -	48.4		Ja. - - - - -	[50.1]
	Paris - - - - -	48.1		Yarn. - - - - -	49.9
	Ad. - - - - -	47.9		Ay. 60 - - - - -	51.5
6391	St. - - - - -	39 28 58.7		Ay. 64 - - - - -	51.7
	R. C. ₂ - - - - -	58.5 ₁		Ad. - - - - -	50.7
	Yarn. - - - - -	57.9	6463	St. - - - - -	59 14 9.7
	Ad. - - - - -	58.3		Oom. - - - - -	9.0
6392	Arm. - - - - -	37 28 31.2		Ay. 64 - - - - -	9.9 ₂
	Pulc. - - - - -	31.9		Leid. - - - - -	9.3
	Ay. 60 - - - - -	31.3		Nyrén - - - - -	9.1
	R. C. ₂ - - - - -	31.7 ₁		Main - - - - -	8.9
	Ay. 64 - - - - -	31.6		Ad. - - - - -	9.3
	Ad. - - - - -	31.5	6456	Arm. - - - - -	36 48 60.4
6394	Pulc. - - - - -	37 27 54.0		Ay. 60 - - - - -	59.6
	Arm. - - - - -	52.8		Ay. 64 - - - - -	59.8
	Ay. 60 - - - - -	53.9		Main - - - - -	59.7
	R. C. ₂ - - - - -	51.9 ₁		Ad. - - - - -	59.9
	Ay. 64 - - - - -	54.1	Gr. 2701	R. C. - - - - -	42 44 50.6
Gr. 2659	Ad. - - - - -	53.5		Ay. 60 - - - - -	49.8
	R. C. - - - - -	53 44 41.2		Ay. 64 - - - - -	50.4
	Arm. - - - - -	40.7		Ad. - - - - -	50.3
6404	Ad. - - - - -	40.9	6470	R. - - - - -	50 33 13.2
	H. - - - - -	41 18 30.5		H. - - - - -	13.6 ₁
	R. C. - - - - -	31.3		R. C. - - - - -	13.9
	Ja. - - - - -	31.0		Ja. - - - - -	12.9
Gr. 2669	Ad. - - - - -	30.9		On. - - - - -	13.3
	Rü. - - - - -	46 10 44.2		Ad. - - - - -	13.4
	A. Ö. - - - - -	44.2 ₁			
	R. C. - - - - -	44.1			
	Ad. - - - - -	44.2			

6404. Confirmed by late Washington observations.
Gr. 2701. P. M. — 0^h.04 Gr.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
6466	Arm. - - - - -	36 44 26.9	6500	T. - - - - -	58 3 11.2
	Yarn. - - - - -	27.0		Rü. - - - - -	12.5
	Ay. 60 - - - - -	27.2		R. C. - - - - -	13.6
	Main - - - - -	29.0		Arm. - - - - -	12.8
	Ad. - - - - -	27.6		Wn. - - - - -	14.2
6468	Arm. - - - - -	33 48 36.6		Äbo and Dorpat - - - - -	12.7
	Ja. - - - - -	36.2		Pulc. - - - - -	14.2
	Sm. - - - - -	35.9		Ad. - - - - -	13.2
	Ay. 72 - - - - -	37.2	6516	R. - - - - -	47 51 30.8 ₁
	Main - - - - -	36.5		R. C. - - - - -	29.6
	Ad. - - - - -	36.5		Ja. - - - - -	29.6
6473	H. - - - - -	41 26 37.6		Ad. - - - - -	29.8
	R. C. - - - - -	37.7	6520	Pi. - - - - -	46 45 30.1
	Ja. - - - - -	37.7		Gr. - - - - -	30.2
	Ad. - - - - -	37.7		T. - - - - -	29.4
6476	T. - - - - -	48 42 13.7		H. - - - - -	30.4
	Rü. - - - - -	14.3		R. C. - - - - -	30.2
	H. - - - - -	15.4		Arm. - - - - -	30.4
	R. C. - - - - -	14.2		Q. - - - - -	30.0 ₁
	Yarn. - - - - -	12.9		Ad. - - - - -	30.2
	Pulc. - - - - -	14.2	6522	Arm. - - - - -	55 28 46.8
	Ad. - - - - -	14.1		Pulc. - - - - -	47.8
6475	St. - - - - -	43 46 56.3		R. C. - - - - -	46.3
	Pulc. - - - - -	56.3		Pulc. 67 - - - - -	47.6
	Ay. 71 - - - - -	56.2		Ad. - - - - -	47.2
	Main - - - - -	56.6	6530	Ay. 45 - - - - -	52 4 49.6
	Ad. - - - - -	56.4		R. C. - - - - -	50.6
6477	R. C. - - - - -	57 19 42.2		Ja. - - - - -	48.4
	Ja. - - - - -	43.1		On. - - - - -	49.6
	Ad. - - - - -	42.6		Ad. - - - - -	49.6
6480	Arm. - - - - -	32 44 31.8	6534	Ja. - - - - -	31 33 32.9
	Ja. - - - - -	31.3		Wn. - - - - -	32.8
	R. C. - - - - -	30.8		Sm. - - - - -	33.3 ₁
	Ay. 64 - - - - -	32.0		Main - - - - -	33.4
	Sm. - - - - -	30.6		Ad. - - - - -	33.1
	Ad. - - - - -	31.3	6551	R. C. - - - - -	53 12 18.1
6491	St. - - - - -	32 31 10.0		Pulc. - - - - -	20.1
	R. C. - - - - -	8.7		Arm. - - - - -	19.3
	Yarn. - - - - -	10.5		Wn. - - - - -	19.6
	Ay. 71 - - - - -	9.2		Ad. - - - - -	19.3
	Ay. 73 - - - - -	9.4	6553	Arm. - - - - -	32 18 22.9
	Main - - - - -	9.7		R. C. - - - - -	22.3
	Ad. - - - - -	9.7		Ay. 64 - - - - -	21.4
6496	R. C. - - - - -	57 38 59.2		Wn. - - - - -	20.9
	Pulc. - - - - -	59.0		Ad. - - - - -	21.9
	Arm. - - - - -	57.6	6556	St. - - - - -	35 54 18.6
	Ay. 60 - - - - -	59.2		Main - - - - -	20.1
	Ad. - - - - -	58.8		Pulc. - - - - -	18.7
6493	P. M. - - - - -	40 30 32.3		Wn. - - - - -	19.6
	R. C. - - - - -	30.4		Ay. - - - - -	18.9
	Ja. - - - - -	32.2		Ad. - - - - -	19.0
	Ad. - - - - -	31.6	Gr. 2770	T. - - - - -	38 43 52.4
6495	R. - - - - -	39 2 44.5		Rü. - - - - -	50.3 ₁
	R. C. - - - - -	43.6		Arm. - - - - -	52.8
	Ja. - - - - -	43.7		R. C. - - - - -	52.4
	Yarn. - - - - -	43.5		Ad. - - - - -	52.2
	Ad. - - - - -	43.8	Gr. 2774	T. - - - - -	38 57 23.3
6497	Pulc. - - - - -	31 58 17.7		R. C. - - - - -	24.4
	Arm. - - - - -	16.5		Arm. - - - - -	25.7
	Ay. 64 - - - - -	18.9		Ad. - - - - -	24.5
	Main - - - - -	18.9			
	Ad. - - - - -	18.0			

Gr. 2770. Later observations by Main give 53".0.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
6566	Ril. - - - - -	50 9 45.2	6623	St. - - - - -	53 8 18.3
	Ay. 45 - - - - -	47.0		Ay. 64 - - - - -	18.5
	R. C. - - - - -	46.2		Ay. 69 - - - - -	17.8
	Ja. - - - - -	47.6		Leid. - - - - -	18.5
	Wn. - - - - -	45.9		Eng. - - - - -	18.5
	Ad. - - - - -	46.4		Ay. 72 - - - - -	18.9
				Ad. - - - - -	18.5
6567	Ja. - - - - -	31 25 53.7	6624	R. C. - - - - -	40 7 50.8
	R. C. - - - - -	54.8		Ja. - - - - -	52.4
	Sm. - - - - -	54.1		Ay. 64 - - - - -	51.3
	Ay. 73 - - - - -	55.2 ₁		Ad. - - - - -	51.5
	Ad. - - - - -	54.3			
6571	Arm. - - - - -	31 4 34.2	6626	Ril. - - - - -	49 20 17.4
	Ja. - - - - -	33.4		R. C. - - - - -	19.3
	Ay. 64 - - - - -	33.8		Ja. - - - - -	17.2
	Main - - - - -	35.3		Ay. 64 - - - - -	18.3
	Wn. - - - - -	33.9		Ay. 68 - - - - -	18.2
	Main 72 - - - - -	33.7		Ad. - - - - -	18.1
	Ay. 72 - - - - -	34.1	6635	Ay. 45 - - - - -	54 8 39.3
	Ad. - - - - -	34.1		R. C. - - - - -	39.1
R. 7219	Ril. - - - - -	58 4 2.5		Ja. - - - - -	39.9
	A. Z. - - - - -	2.8		Ad. - - - - -	39.4
	H. C. - - - - -	3.8	6640	Pulc. - - - - -	57 24 35.1
	Ad. - - - - -	3.1		H. - - - - -	35.3
6579	Arg. - - - - -	49 37 16.3		R. C. - - - - -	34.2
	Wn. - - - - -	15.8		Ja. - - - - -	35.9
	Main - - - - -	15.4 ₂		Ad. - - - - -	35.1
	Ad. - - - - -	16.0	Gr. 2829	Ril. - - - - -	52 8 11.7
6583	Arm. - - - - -	56 38 48.2		R. C. - - - - -	13.1
	Pulc. - - - - -	48.8		Ad. - - - - -	12.4
	Ay. 60 - - - - -	48.6	Gr. 2833	Ril. - - - - -	57 31 34.3
	Leid. - - - - -	47.7		H. - - - - -	35.1
	Ay. 69 - - - - -	47.5		R. C. - - - - -	35.4
	Ad. - - - - -	48.1		Pulc. - - - - -	34.9 ₂
				Ad. - - - - -	34.9
6581	R. C. - - - - -	38 55 54.9	6651	T. - - - - -	36 12 [22.4]
	Arm. - - - - -	54.3		Arm. - - - - -	21.7
	Ay. 60 - - - - -	54.9		Pulc. - - - - -	21.3
	Main - - - - -	54.4		H. C. - - - - -	21.8
	Ay. 70-3 - - - - -	54.8		Ay. 64 - - - - -	22.0
	Ad. - - - - -	54.7		Main - - - - -	22.0
6593	R. - - - - -	40 8 28.9 ₁		Ad. - - - - -	21.8
	R. C. - - - - -	32.5	6656	Ril. - - - - -	43 8 43.6 ₁
	Ja. - - - - -	30.9		H. - - - - -	43.9
	Ad. - - - - -	31.1		R. C. - - - - -	44.5
6601	Pulc. - - - - -	57 29 25.0		Ja. - - - - -	44.8
	R. C. - - - - -	23.2 ₁₁		Ay. 60 - - - - -	44.5
	Ay. 45 - - - - -	23.4		Ad. - - - - -	44.4
	Arm. - - - - -	24.1 ₃	6659	T. - - - - -	50 1 39.5
	Ad. - - - - -	23.8		Ay. 45 - - - - -	39.8
6599	St. - - - - -	37 54 42.9		R. C. - - - - -	39.7
	Pulc. - - - - -	43.2		Arm. - - - - -	39.4
	Yarn. - - - - -	43.3		On. - - - - -	39.5
	Ay. 72 - - - - -	44.1		Ad. - - - - -	39.6
	Ad. - - - - -	43.3	6667	Arm. - - - - -	36 4 6.1
6603	R. C. - - - - -	49 51 3.8		Ay. 64 - - - - -	7.4
	Ja. - - - - -	2.8		Main - - - - -	6.2
	Seeb. - - - - -	3.8		Wn. - - - - -	5.0
	Ad. - - - - -	3.6		Main 71 - - - - -	6.2
				Yarn. - - - - -	4.2
				Ad. - - - - -	5.7

6635. Later observations (Washington) indicate a P. M. of about $-0''.05$ and correction to declination of about $-2''$.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
Gr. 2844	R. C. - - - - -	44 41 4.4	6720	Rü. - - - - -	43 40 18.1
	Pulc. - - - - -	5.0		R. C. - - - - -	18.7
	H. - - - - -	5.1		Ja. - - - - -	18.2
	Ad. - - - - -	4.8		Ad. - - - - -	18.4
Gr. 2845	H. - - - - -	44 45 47.7	6723	T. - - - - -	50 58 8.7
	R. C. - - - - -	46.1		H. - - - - -	9.6
	Ad. - - - - -	46.9		R. C. - - - - -	9.7
6681	T. - - - - -	57 46 34.0		Arm. - - - - -	7.5
	R. - - - - -	33.7		On. - - - - -	9.3
	R. C. - - - - -	34.1		R. C. ₂ - - - - -	8.5
	Arm. - - - - -	33.0		Leid. - - - - -	8.6
	Ad. - - - - -	33.7		Eng. - - - - -	8.5
				Ad. - - - - -	8.8
6687	Arm. - - - - -	52 3 59.0	6721	Gr. R. C. - - - - -	47 53 35.1
	Pulc. - - - - -	59.7		R. C. - - - - -	34.8
	Ay. 60 - - - - -	58.4		Ja. - - - - -	34.5
	Ay. 69 - - - - -	59.1		Yarn. - - - - -	35.3
	Leid. - - - - -	59.4		Wn. - - - - -	34.8
	Eng. - - - - -	59.1		Ad. - - - - -	34.9
	Ad. - - - - -	59.2			
6697	St. - - - - -	51 27 51.0	R.C.4379	Rü. - - - - -	59 53 9.0
	R. C. ₂ - - - - -	50.6		Ay. 40 - - - - -	9.8
	Ay. 69 - - - - -	50.4		R. C. - - - - -	11.2
	Leid. - - - - -	51.1		Ad. - - - - -	10.0
	Eng. - - - - -	50.8			
	Ad. - - - - -	50.9	6722	Arm. - - - - -	36 40 6.5
6698	Arm. - - - - -	34 11 18.1		Ay. 64 - - - - -	7.2
	Ay. 64 - - - - -	17.4		Main - - - - -	5.2
	Main - - - - -	19.6		Ay. 72 - - - - -	5.8
	Wn. - - - - -	17.3		Ad. - - - - -	6.2
	Ay. 71 - - - - -	17.7	6728	R. - - - - -	43 25 37.9
	Ay. 73 - - - - -	17.0		R. C. - - - - -	38.0
	Ad. - - - - -	17.9		Ja. - - - - -	38.4
XIX, 193	T. - - - - -	55 27 58.0		Yarn. - - - - -	37.7
	R. C. - - - - -	59.4		Ad. - - - - -	38.0
	Arm. - - - - -	59.1			
	Ad. - - - - -	58.8	6730	Arm. - - - - -	49 57 31.6
Gr. 2872	Ay. 40 - - - - -	54 59 35.9		Q. - - - - -	33.0 ₁
	R. C. - - - - -	35.7		Ay. 60 - - - - -	33.8
	H. C. - - - - -	34.7		Ay. 64 - - - - -	32.5 ₃
	Ad. - - - - -	35.4		Yarn. - - - - -	33.1 ₂
				Ad. - - - - -	32.7
6712	Arg. - - - - -	58 19 58.8	6731	Pulc. - - - - -	44 25 8.9
	Pulc. - - - - -	58.5		H. - - - - -	9.7
	Wn. - - - - -	57.6		R. C. - - - - -	9.5
	Ad. - - - - -	58.4		Ja. - - - - -	10.2
				Ad. - - - - -	9.6
6711	Rü. - - - - -	38 29 26.0	6734	St. - - - - -	49 55 55.8
	R. C. - - - - -	26.2		Leid. - - - - -	56.9
	Ja. - - - - -	25.9		Eng. - - - - -	56.2
	Ad. - - - - -	26.0		Pulc. - - - - -	56.9
6717	Rü. - - - - -	48 59 28.0		Yarn. - - - - -	57.2
	R. C. - - - - -	27.8		Main - - - - -	57.3
	Ja. - - - - -	27.9		Ad. - - - - -	56.6
	Ay. 60 - - - - -	27.2			
	Ad. - - - - -	27.7	6741	Pi. - - - - -	48 59 46.8
6718	Pulc. - - - - -	42 8 23.5		Gr. - - - - -	43.5
	R. C. - - - - -	24.2		T. - - - - -	[36.8]
	H. - - - - -	24.7		Rü. - - - - -	[41.8]
	Rü. - - - - -	23.6		R. C. - - - - -	43.7
	Ja. - - - - -	23.9		Arm. - - - - -	45.0
	Ad. - - - - -	24.0		Ay. 60 - - - - -	44.7
				Ad. - - - - -	44.5

Gr. 2844. A P. M. of about $-0''.1$ probable; has not been used.Gr. 2872. P. M. $+0''.11$ from Gr. Omitted in catalogue.6711. Later observations (Yarnall) indicate P. M. $+0''.04$, declination $27''.2$.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
6745	Pulc. - - - - -	42 31 49.1	6777	T. - - - - -	34 42 33.3
	R. C. - - - - -	50.3		II. - - - - -	33.3
	Arm. - - - - -	50.5		Arm. - - - - -	34.6
	Ay. 60 - - - - -	49.5		Yaru. - - - - -	32.2
	Yaru. - - - - -	48.2		R. C. ₂ - - - - -	33.2
	Ad. - - - - -	49.6		Main. - - - - -	35.3
				Wn. - - - - -	32.8
6748	H. - - - - -	54 40 50.4		Main - - - - -	32.9 ₁
	R. C. - - - - -	49.2		Ad. - - - - -	33.5
	Ja. - - - - -	50.7	6784	Arm. - - - - -	33 26 [19.2]
	Pulc. - - - - -	50.6		Ay. 60 - - - - -	17.0
	Ay. 60 - - - - -	50.8		R. C. ₂ - - - - -	15.5
	Wn. 67 - - - - -	52.4		Ay. 64 - - - - -	16.6
	Wn. 73 - - - - -	52.6		Main - - - - -	15.3
	Ad. - - - - -	51.2		Ay. 72 - - - - -	16.3
				Ad. - - - - -	16.2
6754	Gr. - - - - -	45 13 46.8	6799	H. - - - - -	47 35 58.6
	II. - - - - -	47 9		R. C. - - - - -	57.6
	R. C. - - - - -	46.0		Arm. - - - - -	58.3
	Ja. - - - - -	45.9		Ja. - - - - -	58.7
	LeV. - - - - -	46.7		Ad. - - - - -	58.3
	Wn. - - - - -	46.4			
	Ad. - - - - -	46.8			
Gr. 2912	H. - - - - -	39 57 33.4	6800	T. - - - - -	33 7 32.5
	R. C. - - - - -	33.2		Arm. - - - - -	32.8
	Pulc. - - - - -	32.9		R. C. ₂ - - - - -	32.1
	Ad. - - - - -	33.2		Ad. - - - - -	32.5
6763	Pulc. - - - - -	50 14 8.9	Gr. 2946	Ay. 45 - - - - -	56 36 6.5 ₂
	Ay. 60 - - - - -	9.3		R. C. - - - - -	8.1
	R. C. ₂ - - - - -	7.7		H. C. - - - - -	7.0
	Ad. - - - - -	8.6		Ad. - - - - -	7.3
6764	R. C. - - - - -	50 13 41.8	6806	R. C. - - - - -	38 23 47.2
	Ay. 60 - - - - -	42.1		Pulc. - - - - -	47.1
	R. C. ₂ - - - - -	40.3		Arm. - - - - -	45.9
	Bonn. - - - - -	42.0		R. C. ₂ - - - - -	47.3
	Ad. - - - - -	41.6		Ay. 64 - - - - -	46.9
6765	Rü. - - - - -	38 22 26.0		Ad. - - - - -	46.9
	R. C. - - - - -	30.4	χ Cygni	II. - - - - -	32 35 58.6
	Ja. - - - - -	29.2		Pulc. - - - - -	56.4 ₁
	Ad. - - - - -	28.5		Bonn. - - - - -	57.5
6769	R. C. - - - - -	41 28 26.6		Ad. - - - - -	57.7
	Ja. - - - - -	26.6	6818	R. C. - - - - -	59 6 20.4
	Yaru. - - - - -	27.0		Ja. - - - - -	30.0
	Ad. - - - - -	26.7		Oom. - - - - -	18.7
6771	St. - - - - -	37 3 12.3		Wu. - - - - -	18.5
	Pulc. - - - - -	12.1		Ad. - - - - -	19.2
	Ad. - - - - -	12.2	6813	R. C. - - - - -	38 24 7.3
6780	Gr. - - - - -	57 43 7.9		Arm. - - - - -	5.3
	R. C. - - - - -	9.4		Ja. - - - - -	6.3
	Ja. - - - - -	8.6		R. C. ₂ - - - - -	7.3
	Ay. 60 - - - - -	8.0		Ay. - - - - -	5.8
	Ad. - - - - -	8.5		Ad. - - - - -	6.4
6779	St. - - - - -	44 49 36.0	6817	Gr. R. C. - - - - -	40 16 57.5
	Ay. 64 - - - - -	36.0		Ay. 45 - - - - -	57.9
	Yaru. - - - - -	36.1		II. - - - - -	57.9
	Ay. 69 - - - - -	35.8		R. C. - - - - -	56.9
	Leid. - - - - -	35.3		Ja. - - - - -	58.0
	Eng. - - - - -	36.2		Yaru. - - - - -	56.8
	Main 70 - - - - -	35.1		Ay. 60 - - - - -	57.1
	Ay. 72 - - - - -	35.8		Ad. - - - - -	57.4
	Ad. - - - - -	35.7			

6748. P. M. + 0".05 from Groombridge. There is some suspicion of error in Gr.; without it the P. M. would be + 0".14 and the declination 52".8.
 Gr. 2946. P. M. — 0".10 from Gr.
 6-18. Ja. probably 10" in error.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
6824	Pulc. - - - - -	52 40 17.3	6857	H. - - - - -	40 1 58.9
	Arm. - - - - -	16.6		R. C. - - - - -	58.4
	Ay. 60 - - - - -	17.4		Arm. - - - - -	58.0
	Wn. - - - - -	16.4		Ja. - - - - -	57.4
	Ad. - - - - -	16.9		Ay. 60 - - - - -	59.3
Gr. 2957	R. C. - - - - -	47 3 23.7		Yarn. - - - - -	57.0 ₂
	Arm. - - - - -	23.0		Ad. - - - - -	58.3
	Ad. - - - - -	23.4	6860	T. - - - - -	38 7 21.3
6830	H. - - - - -	47 36 36.5		R. C. - - - - -	23.3
	R. C. - - - - -	35.1		Q. 63 - - - - -	21.2 ₂
	Ja. - - - - -	37.0		Ad. - - - - -	22.0
	LeV. - - - - -	35.7	6865	Ay. 45 - - - - -	50 34 1.9
	Ad. - - - - -	36.1		H. - - - - -	3.1
6847	Pulc. - - - - -	57 11 46.8		R. C. - - - - -	1.9
	R. C. - - - - -	47.1		Arm. - - - - -	1.2
	Arm. - - - - -	46.6		Ja. - - - - -	2.0
	Ay. 64 - - - - -	46.5		On. - - - - -	2.2
	Ad. - - - - -	46.8		Ad. - - - - -	2.0
Gr. 2978	R. C. - - - - -	57 50 23.6	6867	T. - - - - -	58 30 45.1
	Arm. - - - - -	21.3		Ay. 45 - - - - -	46.7
	Ad. - - - - -	22.5		H. - - - - -	45.6
R.C.4507	R. C. - - - - -	39 50 31.1		R. C. - - - - -	46.3
	H. C. - - - - -	30.1		Arm. - - - - -	46.8
	Ad. - - - - -	30.6		Pulc. - - - - -	46.1
6852	H. - - - - -	59 22 42.2	XIX, 370	Ad. - - - - -	46.2
	R. C. - - - - -	42.1		T. - - - - -	56 21 6.8
	Arm. - - - - -	42.1		H. - - - - -	5.7
	Ja. - - - - -	42.8		Arm. - - - - -	6.2
	Oom. - - - - -	42.6		Ad. - - - - -	6.2
	Smyth - - - - -	41.9	6875	Arm. - - - - -	36 42 6.0
	Ad. - - - - -	42.3		R. C. - - - - -	5.4
Gr. 2977	R. C. - - - - -	47 12 37.2		Ay. 64 - - - - -	4.0
	Arm. - - - - -	37.7 ₁		Wn. - - - - -	3.7
	Ad. - - - - -	37.4		Ay. 68 - - - - -	4.0
6849	Pulc. - - - - -	38 9 20.2		Ad. - - - - -	4.6
	Yarn. - - - - -	20.4	6876	H. - - - - -	45 25 56.1
	R. C. - - - - -	20.2		R. C. - - - - -	55.8
	Arm. - - - - -	19.8		Arm. - - - - -	55.3
	Ay. 64 - - - - -	20.0		Ja. - - - - -	55.5
	Ad. - - - - -	20.1		Ad. - - - - -	55.7
6851	Arm. - - - - -	34 45 8.5	6881	T. - - - - -	51 42 50.7
	Ay. 60 - - - - -	8.1		H. - - - - -	50.7
	Yarn. - - - - -	8.2		R. C. - - - - -	49.7
	Ay. 71-2 - - - - -	9.0 ₂		Arm. - - - - -	49.3
	Ad. - - - - -	8.5		On. - - - - -	50.2
6856	Pulc. - - - - -	52 6 27.6	XIX, 391	Ad. - - - - -	50.1
	R. C. - - - - -	27.9	Gr. 3011	T. - - - - -	57 28 3.5
	Ay. 64 - - - - -	28.3		R. C. - - - - -	3.2
	Ay. 69 - - - - -	27.8		Arm. - - - - -	3.1
	Leiden - - - - -	28.0		Ad. - - - - -	3.3
	Eng. - - - - -	27.3	Gr. 3013	R. C. - - - - -	40 30 42.6
	Ad. - - - - -	27.8		Arm. - - - - -	40.2 ₂
R.C.4521	R. C. - - - - -	59 16 11.8		Ad. - - - - -	41.8
	Oom. - - - - -	11.5	Gr. 3014	R. C. - - - - -	43 46 21.0
	Ad. - - - - -	11.6		Arm. - - - - -	22.5 ₁
6863	R. C. - - - - -	57 55 14.7		Ad. - - - - -	21.5
	Arm. - - - - -	13.7 ₂	6895	Arm. - - - - -	49 45 27.4
	Ja. - - - - -	13.5		Ay. 60 - - - - -	26.9
	Ad. - - - - -	14.0		Leid. - - - - -	27.3
				Eng. - - - - -	27.3
				Seeb. - - - - -	27.2
				Main 72 - - - - -	26.4
				Ad. - - - - -	27.1

6863. Later observations (Washington) indicate an increase of southerly P. M. to 0".10 and change of decl. by — 1".
 6875. Later observations are, Yarnall 1874, 4".4 (1 obs.); Maia 1875, 4".3.

No.	Authority.	Declination.			No.	Authority.	Declination.		
		°	'	"			°	'	"
6915	Arm.	-	-	35 37 46.2	6969	Ay. 64	-	36 22 20.4	
	Pulc.	-	-	45.1		Yarn.	-	21.0	
	Q.	-	-	45.5		Main	-	19.9 ₂	
	R. C. ₂	-	-	44.6		Ad.	-	20.5	
	Ay. 64	-	-	43.8	6976	St.	-	56 11 8.7	
6918	Ad.	-	-	45.1		Pulc.	-	8.9	
	Rü.	-	-	51 28 [53.4]		Ad.	-	8.7	
	H.	-	-	55.0	6983	Ay. 60	-	47 19 51.2	
	R. C.	-	-	54.6		Ay. 69	-	51.8	
	Ja.	-	-	54.7		Leid.	-	52.0	
	Pulc.	-	-	53.8		Lpz.	-	52.2	
	On.	-	-	53.2		Ad.	-	51.7	
	Ad.	-	-	54.1	Gr. 3110	H.	-	45 11 52.1	
6924	Rü.	-	-	55 58 45.1		R. C.	-	52.4	
	R. C.	-	-	46.5		Ad.	-	52.2	
	Ay. 45	-	-	46.8	6985	R. C.	-	49 50 54.6	
	Ad.	-	-	46.1		Ja.	-	55.6	
6928	H.	-	-	52 47 49.8		Seeb.	-	55.2	
	R. C.	-	-	49.0		Ad.	-	55.1	
	Ja.	-	-	48.9	6986	R. C.	-	39 58 45.9	
	Wn.	-	-	48.4		Arm.	-	45.8	
	Ay.	-	-	47.6		Ja.	-	44.8	
	Leid.	-	-	48.6		R. C. ₂	-	44.1	
	Eng.	-	-	48.6		Ay. 64	-	44.7	
	Ad.	-	-	48.6		Ad.	-	45.1	
6937	Arm.	-	-	36 28 22.9	6990	Arm.	-	37 38 43.4	
	Yarn.	-	-	22.4		R. C. ₂	-	41.1	
	Ay. 60	-	-	22.0		Ay. 64	-	42.1	
	R. C. ₂	-	-	20.9		Main	-	43.3	
	Ay. 72	-	-	21.1		Main 71	-	42.6	
	Ad.	-	-	21.9		Ad.	-	42.5	
6959	H.	-	-	51 5 18.8	6996	Pulc.	-	40 20 35.6	
	R. C.	-	-	18.1		Arm.	-	34.3	
	Arm.	-	-	18.3		Ja.	-	36.4	
	Ja.	-	-	18.3		Ay. 64	-	35.2	
	Pulc.	-	-	18.3		Ad.	-	35.4	
	Ay. 60	-	-	16.7	6997	Arm.	-	36 36 33.9	
6962	Ad.	-	-	18.1		Ay. 64	-	34.6	
	Arm.	-	-	46 26 18.5		Main	-	34.5	
	Ay. 64	-	-	17.6		Main 70	-	33.9	
	Ay. 68	-	-	18.8 ₁		Ad.	-	34.2	
	Main 71	-	-	16.9 ₂	6998	Arm.	-	34 35 35.6	
6963	Ad.	-	-	17.9		Ay. 64	-	34.4	
	R. C.	-	-	43 0 2.6		Main	-	35.7	
	Ja.	-	-	2.6		Ay. 73	-	35.2	
	Ay. 60	-	-	1.8		Ad.	-	35.2	
	Ad.	-	-	2.3	7001	R. C.	-	38 36 48.8	
6965	St.	-	-	46 21 46.6		Ja.	-	50.4	
	Ay. 69	-	-	46.5		Yarn.	-	49.6	
	Leid.	-	-	47.0		Ad.	-	49.6	
	Eng.	-	-	47.1	7007	Pulc.	-	49 6 22.8	
	Main	-	-	46.1		R. C.	-	22.8	
	Ad.	-	-	46.6		Ay. 64	-	23.6	
XX, 63 R.C.4661	T.	-	-	46 20 0.2		Ad.	-	23.0	
	R. C.	-	-	0.0	7006	Arm.	-	36 44 24.1	
	Ay. 45	-	-	0.9		R. C. ₂	-	23.6	
	Ay. 60-64	-	-	1.2 ₂		Yarn.	-	23.6	
	Ad.	-	-	0.6		Ay. 64	-	23.9	
6967	Arm.	-	-	36 25 23.7		Smyth	-	23.5	
	Q.	-	-	30.0		Ad.	-	23.7	
	R. C. ₂	-	-	27.8					
	Ay. 64	-	-	28.1					
	Yarn.	-	-	23.3					
	Main 70	-	-	27.4					
	Ad.	-	-	28.5					

6915. Yarnall 1874 gives 45".2 (2 obs.).

6928. The catalogue place is 0".2 too far north.

7007. P. M. — 0".07 from Bessel 1815.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
Gr. 3142	H. - - - - -	55 0 25.6	7062	Arm. - - - - -	48 58 9.6
	R. C. - - - - -	25.7		Ay. 60 - - - - -	9.7
	Pulc. - - - - -	25.5 ₂		Ay. 64 - - - - -	10.2
	Ay. 45 - - - - -	26.9 ₁		Yarn. - - - - -	9.0 ₂
	Ad. - - - - -	25.5		Ay. 71 - - - - -	9.7 ₃
				Ad. - - - - -	9.7
7008	R. C. - - - - -	39 0 35.2	7064	Pulc. - - - - -	56 13 38.3
	Arm. - - - - -	37.6		H. - - - - -	38.0
	Ja. - - - - -	36.6		R. C. - - - - -	38.4
	Ay. 60-64 - - - - -	35.2 ₂		Ja. - - - - -	37.7
	Ay. 69 - - - - -	35.8		Wn. - - - - -	38.3
	Ad. - - - - -	36.1		Ad. - - - - -	38.1
7022	St. - - - - -	39 51 27.5	7073	Arm. - - - - -	36 2 19.4
	R. C. ₂ - - - - -	27.9		Ay. 64 - - - - -	18.7
	Yarn. - - - - -	26.2		Main - - - - -	19.7
	Leid. - - - - -	27.0		Wn. - - - - -	18.1
	Eng. - - - - -	27.0		Yarn. - - - - -	18.4
	Ay. 72 - - - - -	27.1		Main 71 - - - - -	19.1
	Main - - - - -	26.7		Ad. - - - - -	18.9
	Ad. - - - - -	27.2			
7027	Gr. - - - - -	40 37 38.6	7076	Pulc. - - - - -	48 30 14.1
	H. - - - - -	39.8		R. C. - - - - -	14.2
	R. C. - - - - -	38.8		Arm. - - - - -	13.3
	Arm. - - - - -	38.7		Ay. 64 - - - - -	13.5 ₂
	Ja. - - - - -	39.5		Ad. - - - - -	13.8
	Ay. 60 - - - - -	37.5	7083	Arg. 209 - - - - -	45 30 17.7
	Pulc. - - - - -	38.6		Wn. - - - - -	16.0
	Ad. - - - - -	38.8		R. C. ₂ - - - - -	18.4
7029	Pulc. - - - - -	31 47 14.4		Ad. - - - - -	17.5
	Arm. - - - - -	15.6	7084	Arm. - - - - -	36 30 56.4
	Yarn. - - - - -	14.5		Main - - - - -	57.2
	Ay. 60 - - - - -	15.5		Wn. - - - - -	56.2
	Ad. - - - - -	15.0		Ay. 73 - - - - -	56.2
7035	R. C. - - - - -	54 16 13.9		Ad. - - - - -	56.3
	Ja. - - - - -	13.9	7085	Arm. - - - - -	48 31 57.2
	Ad. - - - - -	13.9		Yarn. - - - - -	55.9
7041	R. C. - - - - -	42 11 49.3		Ay. 69 - - - - -	55.8
	Ay. 50 - - - - -	47.5		Leid. - - - - -	55.5
	Ja. - - - - -	47.6		Ad. - - - - -	55.9
	LeV. - - - - -	48.3	7086	H. - - - - -	55 38 57.4
	Ad. - - - - -	48.2		R. C. - - - - -	57.4
7048	R. C. - - - - -	39 59 34.9		Arm. - - - - -	57.3
	Ja. - - - - -	34.2		Ja. - - - - -	57.0
	Ad. - - - - -	34.6		Sm. - - - - -	57.0
7055	R. C. - - - - -	54 16 31.7		Pulc. - - - - -	58.3
	Ja. - - - - -	32.6		Ad. - - - - -	57.4
	Ad. - - - - -	32.2	7091	Arm. - - - - -	48 47 57.2
7060	R. C. - - - - -	59 11 31.8		Yarn. - - - - -	56.7
	Ja. - - - - -	31.8		Ay. 60 - - - - -	56.1
	Oom. - - - - -	30.4		Eng. - - - - -	56.2
	Ad. - - - - -	31.3		Ad. - - - - -	56.4
7061	Arm. - - - - -	38 1 51.9	Gr. 3215	R. C. - - - - -	41 27 26.4
	Ay. 64 - - - - -	50.1		H. C. - - - - -	25.1
	Main - - - - -	51.2		Ad. - - - - -	25.7
	Ay. 73 - - - - -	50.6	7100	R. C. - - - - -	42 45 59.3
	Ad. - - - - -	51.0		Ja. - - - - -	58.4
				Ad. - - - - -	58.9

7062. Main 1875 gives 9''.8 (3 obs.).

7064. P. M. + 0''.02 from Gr.

7076. P. M. - 0''.04 from Pi.

7083. P. M. from Argelander.

7086. The Pulcova observations are taken from Bäcklund's paper on the latitude of Lund, with S. C. + 0''.4

Gr. 3215. The P. M. + 0''.43, from Groombridge, seems to be certain.

DETAILS OF POSITIONS—DIVISION IV.

161

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
7101	R. C. - - - - -	41 2 49.8	7153	R. C. - - - - -	52 32 13.5
	Ja. - - - - -	49.9		Ja. - - - - -	14.9
	Wn. 73 - - - - -	48.4		Ad. - - - - -	14.2
	Ad. - - - - -	49.1			
7103	Arm. - - - - -	34 49 25.9	7158	Pulc. - - - - -	40 8 17.9
	Ay. 64 - - - - -	24.9		H. - - - - -	19.7
	Main - - - - -	26.4		R. C. - - - - -	18.3
	Ay. 72 - - - - -	25.6		Ja. - - - - -	19.5
	Ay. 73 - - - - -	25.4		Yarn. - - - - -	17.8
	Ad. - - - - -	25.6		Ad. - - - - -	18.6
7105	T. - - - - -	56 21 22.2	7161	Ja. - - - - -	45 13 33.6
	H. - - - - -	21.5		Arm. - - - - -	32.9
	R. C. - - - - -	21.5		R. C. - - - - -	33.1
	Arm. - - - - -	21.2		Ay. 64 - - - - -	32.7
	Pulc. - - - - -	21.2		Sm. - - - - -	32.7
	Ad. - - - - -	21.5		Ad. - - - - -	33.0
Gr. 3220	R. C. - - - - -	41 20 51.2	7164	Arm. - - - - -	31 51 48.6
	H. C. - - - - -	49.6		Ay. 64 - - - - -	48.8
	Ad. - - - - -	50.4		Main - - - - -	49.0
7112	H. - - - - -	46 15 57.1		Ay. 68 - - - - -	49.8
	R. C. - - - - -	55.8		Ay. 71 - - - - -	48.8
	Ja. - - - - -	56.5		Ad. - - - - -	49.0
	Yarn. - - - - -	56.7	7174	R. C. - - - - -	41 16 12.8
	Ad. - - - - -	56.5		Pulc. - - - - -	11.7
7114	R. C. - - - - -	40 40 5.2		Ja. - - - - -	12.5
	Ja. - - - - -	6.3		Ad. - - - - -	12.2
	Yarn. - - - - -	6.6 ₂	7182	Arm. - - - - -	49 53 31.1
	Ad. - - - - -	6.0		R. C. - - - - -	28.8
R.C. 4371	R. C. - - - - -	41 17 15.7		Ay. 64 - - - - -	30.7
	H. C. - - - - -	16.3		Ay. 69 - - - - -	30.1
	Bonn. - - - - -	15.9 ₁		Leid. - - - - -	30.6
	Ad. - - - - -	16.0		Eng. - - - - -	30.6
7119	R. C. - - - - -	41 27 30.5		Ad. - - - - -	30.3
	Ja. - - - - -	30.9	7189	T. - - - - -	56 56 10.6
	Ad. - - - - -	30.7		R. C. - - - - -	10.2
7120	T. - - - - -	51 25 25.4		Arm. - - - - -	12.4
	R. C. - - - - -	26.0		Ad. - - - - -	11.1
	On. - - - - -	24.2	7194	Arm. - - - - -	30 15 52.2
	Ad. - - - - -	25.2		R. C. - - - - -	51.0
7131	Arm. - - - - -	31 8 12.2		Ay. 64 - - - - -	51.4
	Ay. 64 - - - - -	13.2		Main - - - - -	51.9
	Main - - - - -	13.5		Ad. - - - - -	51.6
	Wn. - - - - -	13.1	7198	Pulc. - - - - -	46 50 38.7
	Main 71 - - - - -	12.5		H. - - - - -	39.3
	Wn. 73 - - - - -	13.1		R. C. - - - - -	37.4
	Ad. - - - - -	12.6		Ja. - - - - -	39.3
7132	Arm. - - - - -	31 5 15.1		Wn. 72 - - - - -	38.2
	Ay. 64 - - - - -	14.7		Ad. - - - - -	38.6
	Main - - - - -	14.7	7204	St. - - - - -	33 30 11.2
	Yarn. - - - - -	14.7 ₂		Ay. 64 - - - - -	10.5
	Main 71 - - - - -	13.6		Ay. 69 - - - - -	11.4
	Wn. 73 - - - - -	13.9		Leid. - - - - -	10.4
	Ad. - - - - -	14.4		Eng. - - - - -	11.5
Gr. 3243	R. C. - - - - -	42 24 8.9		Main - - - - -	10.7
	H. C. - - - - -	7.7		Ay. 72 - - - - -	11.4
	Ad. - - - - -	8.3		Ad. - - - - -	11.0

Gr. 3220. P. M. used, — 0".10 from Gr.
7119. I have gone back from the P. M. used in L. S. C. (+ 0".05).
Gr. 3243. P. M. + 0".20 from L. (3 obs.) and Gr.
7164. Ay. 64 has double weight.
7174. Pulc. (6 obs.) has double weight.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
7213	St. - - - - -	36 1 56.1	7260	Rii. - - - - -	40 13 39.0
	Ay. 69 - - - - -	55.6		R. C. - - - - -	41.9
	Eng. - - - - -	56.3		Ja. - - - - -	41.7
	Leid. - - - - -	55.6		Wn. - - - - -	40.4
	Main. - - - - -	56.3		Ad. - - - - -	40.8
	Pule. - - - - -	55.6			
	Ad. - - - - -	56.0	7262	R. C. - - - - -	54 2 17.4
7215	St. - - - - -	57 7 54.0		Yarn. - - - - -	17.4
	Pule. - - - - -	53.6		Ay. 64 - - - - -	17.3
	Ad. - - - - -	53.8		Wn. - - - - -	17.5
				Ay. 68 - - - - -	18.3
7218	R. C. - - - - -	52 32 26.0		Ad. - - - - -	17.5
	Ja. - - - - -	25.9	Gr. 3327	R. C. - - - - -	49 3 33.4
	Wn. - - - - -	26.5		Arm. - - - - -	35.5 ₂
	Ad. - - - - -	26.1		Ay. 60 - - - - -	32.4
7219	R. C. - - - - -	45 7 17.7		Ad. - - - - -	33.4
	Ja. - - - - -	18.0	XX, 401	F. - - - - -	43 53 42.7 ₁
	Yarn. - - - - -	16.9		Arm. - - - - -	40.8 ₁
	Ad. - - - - -	17.5		H. C. - - - - -	42.4 ₁
7233	Arm. - - - - -	45 39 2.8		Bonn. - - - - -	43.3
	LeV. - - - - -	3.7		Yarn. - - - - -	42.8 ₂
	Wn. - - - - -	4.6		Ad. - - - - -	42.6
	Ay. 72 - - - - -	3.4 ₁	7268	R. C. - - - - -	46 56 21.9
	Ad. - - - - -	3.7		Arm. - - - - -	20.9
7241	Arm. - - - - -	43 35 20.9		Ja. - - - - -	22.5
	Q. - - - - -	20.8		Yarn. - - - - -	20.8
	R. C. ₂ - - - - -	20.3		Ay. 60 - - - - -	21.8
	Ay. 64 - - - - -	20.7 ₂		R. C. ₂ - - - - -	20.6
	Wn. 73 - - - - -	20.9 ₂		Ay. 64 - - - - -	20.3 ₂
	Ad. - - - - -	20.7		Wn. - - - - -	21.5
7243	R. C. - - - - -	50 19 8.5		Sm. - - - - -	21.4
	Ja. - - - - -	9.3		Ad. - - - - -	21.3
	Ou. - - - - -	8.4	7273	R. C. - - - - -	44 26 40.5
	Wn. - - - - -	7.9		Ja. - - - - -	42.9
	Ad. - - - - -	8.5		Wn. - - - - -	40.8
Gr. 3311	R. C. - - - - -	51 55 37.2		Ad. - - - - -	41.4
	Arm. - - - - -	36.8	7274	Arm. - - - - -	48 42 57.8
	Ad. - - - - -	37.0		Ja. - - - - -	56.2
7253	Arm. - - - - -	43 54 53.2		Yarn. - - - - -	55.4
	Ja. - - - - -	53.1		Wn. 73 - - - - -	55.7
	Yarn. - - - - -	52.7		Ay. 73 - - - - -	56.5 ₁
	Ay. 60 - - - - -	52.8		Ad. - - - - -	56.3
	Ay. 64 - - - - -	52.9	7278	R. C. - - - - -	50 14 57.4
	Wn. - - - - -	53.1		Ja. - - - - -	57.1
	Ad. - - - - -	53.0		Ou. - - - - -	57.8
7254	R. - - - - -	44 42 31.9		Ad. - - - - -	57.4
	H. - - - - -	32.7	7281	Pule. - - - - -	56 24 24.7
	Pule. - - - - -	32.3		R. C. - - - - -	25.4
	R. C. - - - - -	32.6		Arm. - - - - -	25.1
	Arm. - - - - -	33.2		Q. - - - - -	23.1
	Ja. - - - - -	33.9		Ay. 60 - - - - -	24.4
	Yarn. - - - - -	31.9		Ad. - - - - -	24.5
	Ad. - - - - -	32.7	7290	R. C. - - - - -	43 59 6.7
Gr. 3328	R. C. - - - - -	58 11 0.4		Arm. - - - - -	5.3
	Arm. - - - - -	0.4		Ja. - - - - -	7.1
	Ad. - - - - -	0.4		R. C. ₂ - - - - -	6.2
7259	Arm. - - - - -	43 54 45.0		Yarn. - - - - -	7.5
	Ja. - - - - -	45.6		Ay. 64 - - - - -	7.2
	Ay. 64 - - - - -	44.8 ₁		Sm. - - - - -	6.5
	Yarn. - - - - -	45.0 ₂		Ad. - - - - -	6.6
	Ad. - - - - -	45.1			

7215. In L. S. C. I overlooked Argelander's discussion (St.) of this star.

7262. P. M. + 0".17; c. — o.: Pi. — 1".0; Gr. + 0".9; Gauss, + 0".6.

XX, 401. Three observations (Ay. 74) give 42".7.

7281. Mädler's P. M. used in declination.

7290. Wn. 67, previously overlooked, gives 6".4.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
7294	F. - - - - -	49 58 36.7	7332	R. C. - - - - -	52 47 17.8
	Rñ. - - - - -	38.6		Ja. - - - - -	19.7
	H. - - - - -	36.6		Yarn. - - - - -	20.2
	R. C. - - - - -	37.5		Ad. - - - - -	19.2
	Wn. - - - - -	38.4	Gr. 3387	R. C. - - - - -	54 44 1.3
	Leid. - - - - -	37.7		Arm. - - - - -	2.3
	Ay. 69 - - - - -	37.5		Ad. - - - - -	1.8
	Eng. - - - - -	37.5			
	Ad. - - - - -	37.6	7333	St. - - - - -	43 25 47.7
7297	R. C. - - - - -	39 45 53.4		Ay. 64 - - - - -	47.9
	Ja. - - - - -	52.8		Ay. 69 - - - - -	48.0
	Yarn. - - - - -	52.6		Ay. 71 - - - - -	48.2
	Main. - - - - -	53.5		Main - - - - -	46.8
	Wn. - - - - -	51.6		Ad. - - - - -	47.7
	Main 71 - - - - -	53.0	7337	Ay. 64 - - - - -	38 8 0.0
	Ay. 72 - - - - -	53.0		Ay. 69 - - - - -	0.5
	Ad. - - - - -	52.7		Ay. 71 - - - - -	0.6
				Ad. - - - - -	0.3
7301	Arm. - - - - -	47 2 0.8	F. 3689	Oom. - - - - -	59 45 32.0
	Ay. 60 - - - - -	1.1		Ay. 64 - - - - -	31.9
	Ay. 64 - - - - -	1.2		Ad. - - - - -	32.0
	Ay. 69-70 - - - - -	1.4			
	Yarn. - - - - -	0.1	7345	Arm. - - - - -	47 8 48.0
	Wn. 73 - - - - -	0.7		Ay. 60 - - - - -	48.4
	Ad. - - - - -	1.0		Yarn. - - - - -	48.2 ₂
				Eng. - - - - -	48.4
7306	Pule. - - - - -	45 39 56.4		Ad. - - - - -	48.3
	Arm. - - - - -	55.0	R.C.5132	A. Z. - - - - -	47 10 56.0
	Ay. 64 - - - - -	56.9		R. C. - - - - -	56.8
	Wn. - - - - -	55.7		H. C. - - - - -	56.7
	Ad. - - - - -	56.0		Ad. - - - - -	56.6
7310	Arm. - - - - -	58 57 3.1	7365	T. - - - - -	53 3 11.0
	R. C. - - - - -	1.9		H. - - - - -	11.1
	Pule. - - - - -	1.7		R. C. - - - - -	11.6
	Oom. - - - - -	1.7		Arm. - - - - -	12.0
	Ay. 72 - - - - -	3.0 ₁		Pule. - - - - -	11.9
	Ad. - - - - -	2.3		Wn. - - - - -	11.2
7313	T. - - - - -	39 1 1.2		Leid. - - - - -	11.9
	R. C. - - - - -	1.5		Ay. 69 - - - - -	12.2
	Arm. - - - - -	0 59.6		Eng. - - - - -	12.0
	Ay. 72 - - - - -	1 0.9		Ad. - - - - -	11.7
	Wn. 73 - - - - -	0.3	7373	T. - - - - -	36 7 6.5
	Ad. - - - - -	0.7		Rñ. - - - - -	4.4 ₁
7317	R. C. - - - - -	44 17 53.3		Arm. - - - - -	5.3
	Ja. - - - - -	54.6		Main - - - - -	5.2
	Wn. - - - - -	53.3		Ad. - - - - -	5.5
	Ad. - - - - -	53.7	7377	St. - - - - -	59 28 22.6
				Yarn. - - - - -	22.4
7320	Arm. - - - - -	38 9 51.1		Pule. - - - - -	23.0
	Q. - - - - -	51.6		Ad. - - - - -	22.7
	R. C. ₂ - - - - -	50.5	7383	C. A. - - - - -	40 37 45.5
	Ay. 64 - - - - -	50.7		T. - - - - -	45.2
	Ad. - - - - -	51.0		R. C. - - - - -	44.5
7326	T. - - - - -	41 8 5.8		R. C. ₂ - - - - -	44.1
	R. C. - - - - -	4.8		Yarn. - - - - -	44.5
	Arm. - - - - -	5.1		Wn. - - - - -	44.1
	Ay. 72 - - - - -	3.8		Ad. - - - - -	44.7
	Ad. - - - - -	4.9			

7297. P. M. + 0".20 from Gr.

7301. Double weight to Ay. 64 (21 observations).

7310. Andrews gives 4".6 from one observation of Bradley; Bessel 1815, 1".4. I have assumed no P. M.

7320. Later observations change the adopted value to 50".8 and the class to A.

7326. P. M. used. — 0".04.

7365. P. M. — 0".025; c. — o.: Pi. — 0".5; Gr. — 0".2.

7383. P. M. + 0".05; c. — o.: (Pi.) = + 1".7

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
7385	St. - - - - -	37 30 45.9	7448	R. C. - - - - -	51 7 12.8
	R. C. ₂ - - - - -	45.5		Ja. - - - - -	12.7
	Ay. 73 - - - - -	46.0		Paris - - - - -	11.7
	Wn. 73 - - - - -	46.3		Ad. - - - - -	12.3
	Ad. - - - - -	45.9			
7387	T. - - - - -	59 34 55.6	7453	Arm. - - - - -	36 7 40.6
	R. C. - - - - -	56.6		Yarn. - - - - -	41.6
	Arm. - - - - -	57.1		Ay. 64 - - - - -	40.8
	R. C. ₂ - - - - -	55.8		Main - - - - -	42.1
	Oom. - - - - -	56.2		Ad. - - - - -	41.1
	Ay. 64 - - - - -	56.6			
	Ad. - - - - -	56.3	Gr. 3447	R. C. - - - - -	48 57 28.2
7398	Ay. 60 - - - - -	38 52 17.7		Ay. 60 - - - - -	27.7
	Paris - - - - -	17.9		Ad. - - - - -	27.9
	Ay. 72 - - - - -	16.9			
	Ad. - - - - -	17.6	7455	Pule. - - - - -	46 10 24.3
Gr. 3424	H. - - - - -	42 9 37.2		Arm. - - - - -	24.9
	R. C. - - - - -	38.7		R. C. - - - - -	24.2
	Ad. - - - - -	37.9		Ay. 64 - - - - -	25.0
				Wn. 73 - - - - -	24.3
				Ad. - - - - -	24.3
7399	Arm. - - - - -	34 22 22.3	7462	T. - - - - -	36 34 27.3
	Q. - - - - -	24.6		R. - - - - -	27.3
	R. C. ₂ - - - - -	22.0		H. - - - - -	27.3
	Yarn. - - - - -	21.9		Arm. - - - - -	26.9
	Ad. - - - - -	22.7		Yarn. - - - - -	27.7
7401	T. - - - - -	55 16 23.4		Ay. 70 - - - - -	26.8
	H. - - - - -	24.0		Main - - - - -	27.5
	R. C. - - - - -	26.5		Ad. - - - - -	27.3
	Arm. - - - - -	24.6			
	Yarn. - - - - -	23.7	7465	T. - - - - -	31 40 43.0
	Ay. 64 - - - - -	24.6		H. - - - - -	41.8
	Ad. - - - - -	24.5		Pule. - - - - -	42.4
7402	Arm. - - - - -	43 25 14.1		Arm. - - - - -	43.3
	Yarn. - - - - -	14.2 ₂		Q. - - - - -	42.8
	Ja. - - - - -	14.0		Main - - - - -	41.9 ₁
	Ay. 64 - - - - -	13.9		Ad. - - - - -	42.6
	Ad. - - - - -	14.1			
7411	H. - - - - -	48 58 56.3	7468	T. - - - - -	52 21 21.1
	Pule. - - - - -	56.8		R. C. - - - - -	22.8
	R. C. - - - - -	56.3		Arm. - - - - -	22.9
	Ja. - - - - -	57.2		R. C. ₂ - - - - -	21.7
	Ay. 60 - - - - -	55.4		Pule. V. C. - - - - -	21.9
	Ad. - - - - -	56.4		Ad. - - - - -	22.0
7417	H. - - - - -	58 5 43.8	7469	T. - - - - -	45 52 21.9 ₁
	R. C. - - - - -	43.8		H. - - - - -	22.8
	Arm. - - - - -	42.0		R. C. - - - - -	23.4
	Ja. - - - - -	43.7		Ay. 45 - - - - -	23.8
	Yarn. - - - - -	42.6 ₂		Ad. - - - - -	23.1
	Sm. - - - - -	42.8	XXI, 159	T. - - - - -	46 1 3.9
	Ay. 68 - - - - -	42.8		R. C. - - - - -	3.0
	Ad. - - - - -	43.1		Arm. - - - - -	2.7
				Ay. 45 - - - - -	2.7
				Ad. - - - - -	3.1
7431	H. - - - - -	48 51 14.4	7476	T. - - - - -	59 12 24.9
	R. C. - - - - -	15.6		R. C. - - - - -	25.4
	Pule. - - - - -	14.2		Arm. - - - - -	25.6
	Ja. - - - - -	14.8		Oom. - - - - -	23.2
	Ay. 60 - - - - -	13.8		Ad. - - - - -	24.4
	Yarn. - - - - -	14.6 ₂			
	Ad. - - - - -	14.6			

7385. St. has been corrected by $+1''$, besides the systematic correction of $+0''.4$.

7387. P. M. $-0''.04$; c. — o.: Pi. $+1''.0$; Gr. $-0''.8$.

7398. Paris has double weight.

7448. P. M. $-0''.03$; c. — o.: (Gr.) $+0''.3$.

7462. The catalogue has $27''.5$.

7465. P. M. $+0''.03$ from Pi. Later observations (Main's) give $44''.2$. I should now adopt $43''.7 + 0''.06$ ($t-1875$).

7468. Pi. and Gr. agree to $-0''.4$ and $-0''.3$ (c. — o.) respectively, without P. M.

7469. c. — o.: Pi. $+0''.2$; no P. M.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
7477	R. C. - - - - -	43 47 31.2	7505	Arm. - - - - -	37 58 28.7
	Ja. - - - - -	30.1		R. C. ₂ - - - - -	28.2
	Ad. - - - - -	30.7		Ay. 64 - - - - -	27.6
7480	St. - - - - -	45 59 24.3		Wn. 67 - - - - -	28.2
	Pulc. - - - - -	23.7		Ay. 68 - - - - -	27.2
	Ad. - - - - -	24.0		Ay. 71 - - - - -	27.2
				Wn. 73 - - - - -	26.9
R.C.5252	A. Ö. - - - - -	45 52 42.5		Yarn. 73 - - - - -	26.7 ₁
	Ay. 45 - - - - -	44.5		Ad. - - - - -	27.6
	R. C. - - - - -	44.5	7512	R. C. - - - - -	51 8 31.2
	Ad. - - - - -	44.3		Ja. - - - - -	31.8
7483	H. - - - - -	52 24 30.7		Ou. - - - - -	31.5
	R. C. - - - - -	30.8		Ad. - - - - -	31.5
	Pulc. - - - - -	30.3	7521	St. - - - - -	39 51 10.1
	Arm. - - - - -	29.3		Yarn. - - - - -	10.0 ₂
	Ja. - - - - -	31.6		Pulc. - - - - -	9.0
	Q. - - - - -	28.1 ₁		Ad. - - - - -	9.6
	Ad. - - - - -	30.3	7524	T. - - - - -	38 45 18.4
7488	R. C. - - - - -	51 38 35.8		R. C. - - - - -	19.4
	Ja. - - - - -	36.1		Arm. - - - - -	19.4
	Ou. - - - - -	35.6		Yarn. - - - - -	20.0
	Ay. 64 - - - - -	34.4		Wn. 67 - - - - -	19.4
	Wn. - - - - -	34.3		Wn. 72 - - - - -	18.4
	Ad. - - - - -	35.2		Wn. 73 - - - - -	19.4
7489	R. C. - - - - -	52 4 8.6		Ad. - - - - -	19.2
	Ja. - - - - -	8.4	D. M.	H. C. - - - - -	50 30 9.1
	Ou. - - - - -	7.8	+50°.3382	Bonn. - - - - -	10.6 ₁
	Ad. - - - - -	8.3		Ad. - - - - -	9.6
7494	T. - - - - -	58 51 59.4	7530	R. C. - - - - -	53 28 46.9
	H. - - - - -	56.3		H. C. - - - - -	45.8
	R. C. - - - - -	57.4		Ad. - - - - -	46.4
	Arm. - - - - -	58.4	Gr. 3524	R. C. - - - - -	49 13 56.7
	R. C. ₂ - - - - -	55.1		Ay. 60 - - - - -	55.3
	Oom. - - - - -	57.4		Ad. - - - - -	56.0
	Ad. - - - - -	57.4	Gr. 3533	A. Z. - - - - -	51 47 50.0
7495	H. - - - - -	59 54 31.6		R. C. - - - - -	50.8
	Pulc. - - - - -	31.8		H. C. - - - - -	48.5 ₁
	R. C. - - - - -	31.9		Ad. - - - - -	50.0
	Ja. - - - - -	30.6	7544	Arm. - - - - -	42 42 [21.8]
	Ay. 60 - - - - -	30.6		Pulc. - - - - -	25.7
	Ad. - - - - -	31.3		Ay. 60 - - - - -	25.7
7496	H. - - - - -	47 53 32.7		Ay. 64-72 - - - - -	24.2
	R. C. - - - - -	33.2		Yarn. - - - - -	24.2 ₂
	Ja. - - - - -	32.5		Ad. - - - - -	25.0
	Sm. - - - - -	31.7	7545	St. - - - - -	56 55 26.9
	Ay. 69 - - - - -	32.0		Paris - - - - -	26.3
	Leid. - - - - -	31.9		Main - - - - -	26.9
	Eng. - - - - -	32.0		Pulc. - - - - -	27.1
	Ad. - - - - -	32.3		Ad. - - - - -	26.9
7501	R. C. - - - - -	45 18 0.2	7548	R. C. - - - - -	49 6 58.9
	Arm. - - - - -	0.3		Ja. - - - - -	58.8
	Ja. - - - - -	1.7		Ay. 60 - - - - -	58.5
	Ay. 64 - - - - -	0.5		Wn. 73 - - - - -	57.8
	Wn. - - - - -	17 59.9		Ad. - - - - -	58.7
	Sm. - - - - -	59.6	7554	Arm. - - - - -	40 14 17.8
	Ad. - - - - -	18 0.4		R. C. - - - - -	18.9
7503	Pulc. - - - - -	45 2 23.7		Pulc. - - - - -	18.2
	Yarn. - - - - -	23.2		Ay. 64 - - - - -	17.2
	Ay. 60 - - - - -	22.9		Ad. - - - - -	18.0
	Main - - - - -	23.6 ₁			
	Ad. - - - - -	23.3			

7488. P. M. (from Gr.) + 0".07.

7496. With P. M. — 0".03 the declination for 1875.0 would be 31".7.

7505. Weight of Ay. 64, 2; of Ay. 71 (70 and 72), 1½; the catalogue has 27".8.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
7555	Rü. - - - - -	54 18 15.4	7598	St. - - - - -	48 43 53.7
	R. C. - - - - -	14.6		Pulc. - - - - -	54.2
	Ja. - - - - -	16.2		Wn. 73 - - - - -	55.6
	Wn. 73 - - - - -	14.4 ₂		Ad. - - - - -	54.3
	Ad. - - - - -	15.2			
Gr. 3550	R. C. - - - - -	59 11 2.5	7602	Pulc. - - - - -	38 22 34.5
	Oom. - - - - -	1.8		H. - - - - -	35.5
	Ad. - - - - -	2.1		R. C. - - - - -	35.2
7559	Pulc. - - - - -	40 30 25.0		Arm. - - - - -	36.5 ₂
	R. C. - - - - -	25.8		Ja. - - - - -	35.6
	Arm. - - - - -	25.2		Ay. 72 - - - - -	33.6
	Ay. 64 - - - - -	25.7		Wn. 72 - - - - -	34.2
	Ad. - - - - -	25.4		Ad. - - - - -	34.9
7560	Ou. - - - - -	50 37 10.9	R.C.5408	R. C. - - - - -	40 33 59.2
	Yarn. - - - - -	10.9		H. - - - - -	60.4
	Ay. 60 - - - - -	11.1		Ad. - - - - -	59.8
	Ay. 69 - - - - -	11.3			
	Leid. - - - - -	10.9	7612	R. C. - - - - -	52 6 51.4
	Eug. - - - - -	10.8		Ja. - - - - -	50.8
	Wn. 73 - - - - -	10.5 ₂		Ou. - - - - -	50.3
	Ad. - - - - -	11.0		Ad. - - - - -	50.8
Gr. 3554	A. Z. - - - - -	51 43 16.7	7614	R. C. - - - - -	38 57 6.7
	R. C. - - - - -	17.1		Yarn. - - - - -	7.9
	H. C. - - - - -	17.5		Ja. - - - - -	7.5
	Ad. - - - - -	17.3		Wn. - - - - -	6.9
7565	R. C. - - - - -	40 35 4.0		Yarn. 73 - - - - -	7.7 ₁
	Arm. - - - - -	3.2		Ad. - - - - -	7.3
	Yarn. - - - - -	4.4			
	Ay. 64 - - - - -	2.8	7631	Arm. - - - - -	55 12 35.7
	Ad. - - - - -	3.6		Ja. - - - - -	34.2
Gr. 3556	R. C. - - - - -	49 1 47.3		Yarn. - - - - -	35.0
	Ay. 60 - - - - -	47.0		Main - - - - -	33.6 ₁
	Ad. - - - - -	47.1		Ay. 73 - - - - -	34.9 ₂
7566	Arm. - - - - -	37 42 43.5		Ad. - - - - -	34.8
	Yarn. - - - - -	43.0	Gr. 3601	T. - - - - -	54 27 8.8
	Wn. - - - - -	43.3		R. C. - - - - -	6.7
	Sm. - - - - -	44.2		Arm. - - - - -	8.8
	Ad. - - - - -	43.5		Ad. - - - - -	8.1
Rü. 9430	Ay. 40 - - - - -	37 44 1.2	7636	R. C. - - - - -	55 37 24.9
	Rü. - - - - -	43 59.2 ₁		Arm. - - - - -	25.7
	Arm. - - - - -	44 2.3		Pulc. - - - - -	25.9
	H. C. - - - - -	1.5		R. C. ₂ - - - - -	24.7
	Yarn. - - - - -	1.2 ₂		Pulc. V. C. - - - - -	26.6
	Ad. - - - - -	1.2		Main - - - - -	24.2
7582	T. - - - - -	58 12 27.4		Ad. - - - - -	25.5
	H. - - - - -	25.4	7637	Pulc. M. C. - - - - -	53 24 31.1
	R. C. - - - - -	27.0		R. C. - - - - -	29.7
	Arm. - - - - -	26.2		Arm. - - - - -	32.1
	R. C. ₂ - - - - -	26.6		Q. - - - - -	31.8
	Bonn. - - - - -	26.1		Ay. 64 - - - - -	31.6
	Ad. - - - - -	26.4		Pulc. V. C. - - - - -	30.6
7589	R. C. - - - - -	51 41 31.8		Ad. - - - - -	31.1
	Ja. - - - - -	33.0	7642	Arm. - - - - -	53 20 28.0
	Ou. - - - - -	32.7		Q. - - - - -	28.8
	Ad. - - - - -	32.5		R. C. ₂ - - - - -	26.6
7593	Rü. - - - - -	42 28 59.1 ₁		Ay. 64 - - - - -	27.4
	Ja. - - - - -	29 2.1		Ad. - - - - -	27.7
	R. C. - - - - -	1.7			
	Ad. - - - - -	29 1.3			

7555. The catalogue has 15''4.

7602. Gr. (R. C.) gives 33''1. I have used no P. M.

7636. The Pulcova declination (V. C.) from Bäcklund's paper on the latitude of Lund. The P. M. is assumed = 0; c. - o.: Pi. - 1''0; Gr. + 10''3 (probably 0''3).

7637. Pulc. V. C. from Bäcklund.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
7643	Rü. - - - - -	56 1 10.7	Gr. 3680	R. C. - - - - -	47 37 24.3
	Ay. 40 - - - - -	11.2		Bonn. - - - - -	25.4
	H. - - - - -	9.4		Leid. - - - - -	25.4
	R. C. - - - - -	9.1		Eng. - - - - -	25.5
	Arm. - - - - -	10.4		Ay. 69 - - - - -	25.6
	Ay. 60 - - - - -	11.5		Ad. - - - - -	25.5
	Paris - - - - -	10.5			
	Yarn. - - - - -	11.7 ₂	7705	T. - - - - -	44 24 26.4
	Ad. - - - - -	10.6		H. - - - - -	25.9
7646	R. C. - - - - -	52 39 1.9		R. C. - - - - -	25.7
	Ja. - - - - -	4.0		Pule. - - - - -	25.3
	Ad. - - - - -	2.9		R. C. ₂ - - - - -	24.9
				Ad. - - - - -	25.6
R.C.5476	R. C. - - - - -	45 59 52.2	7718	T. - - - - -	58 13 51.2
	Bonn. - - - - -	53.4		Rü. - - - - -	51.1
	Ad. - - - - -	52.6		R. C. - - - - -	52.1
R.C.5483	R. C. - - - - -	59 12 5.3		Ay. 45 - - - - -	51.0
	Oom. - - - - -	3.9		Arm. - - - - -	51.6
	Ad. - - - - -	4.4		Ad. - - - - -	51.4
7668	Pule. - - - - -	57 3 36.9	7721	Ay. 40 - - - - -	32 33 42.8
	Arm. - - - - -	37.9		Pule. M. C. - - - - -	44.2
	R. C. ₂ - - - - -	37.1		Arm. - - - - -	45.1
	Ay. 64 - - - - -	37.6		Yarn. - - - - -	43.3
	Ad. - - - - -	37.4		Ay. 60 - - - - -	44.2
7676	T. - - - - -	52 16 48.1		Main - - - - -	44.5
	H. - - - - -	48.9		Ay. 72 - - - - -	44.1
	R. C. - - - - -	48.4		Ad. - - - - -	44.0
	Ay. 45 - - - - -	48.0	7727	R. C. - - - - -	47 19 19.9
	R. C. ₂ - - - - -	48.0		Ay. 45 - - - - -	22.0
	Main - - - - -	49.2		Ja. - - - - -	22.4
	Ad. - - - - -	48.5		Ad. - - - - -	21.4
7679	R. C. - - - - -	42 12 42.2	7731	St. - - - - -	32 33 55.8
	Ja. - - - - -	41.6		LeV. - - - - -	55.9
	Ad. - - - - -	41.9		Wn. - - - - -	54.2
7681	H. - - - - -	44 2 53.0		Yarn. - - - - -	54.8
	R. C. - - - - -	52.6		Ay. 72 - - - - -	55.9
	Ja. - - - - -	53.9		Ad. - - - - -	55.3
	Ad. - - - - -	53.2	7736	T. - - - - -	58 40 53.4
7683	Pule. - - - - -	57 23 51.2		H. - - - - -	52.0
	Arm. - - - - -	52.1		R. C. - - - - -	53.0
	Ay. 64 - - - - -	52.5		R. C. ₂ - - - - -	52.4
	Wn. 73 - - - - -	[53.7 ₁]		Ay. 64 - - - - -	53.1
	Ad. - - - - -	51.9		Ad. - - - - -	52.8
7695	R. C. - - - - -	46 37 35.3	7737	T. - - - - -	42 34 26.4
	Ja. - - - - -	37.7		R. C. - - - - -	24.3
	Ad. - - - - -	36.5		Ay. 60 - - - - -	23.2 ₂
				Ad. - - - - -	24.6
7696	Arm. - - - - -	59 12 32.6	7738	T. - - - - -	58 14 23.2
	R. C. ₂ - - - - -	31.1		R. C. - - - - -	21.4
	Oom. - - - - -	32.3		Arm. - - - - -	23.3 ₁
	Ay. 64 - - - - -	32.6		R. C. ₂ - - - - -	20.1
	Ad. - - - - -	32.2		Ay. 64 - - - - -	21.1
7698	T. - - - - -	59 15 38.5		Ay. 68 - - - - -	20.0
	H. - - - - -	40.6 ₁		Ad. - - - - -	21.4
	R. C. - - - - -	40.4	7743	R. C. - - - - -	42 24 59.6
	Arm. - - - - -	41.1		Arm. - - - - -	59.4
	R. C. ₂ - - - - -	39.4		Ja. - - - - -	59.2
	Oom. - - - - -	39.2		Ad. - - - - -	59.4
	Ad. - - - - -	39.7			

7643. P. M. — 0".03 from Pi.
 7737. Declination uncertain.

DETAILS OF POSITIONS—DIVISION IV.

169

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
7820	Pule. - - - - -	48 50 35.1	7848	St. - - - - -	57 46 32.5
	Arm. - - - - -	34.8		R. C. ₂ - - - - -	32.0
	Ay. 60 - - - - -	34.2		Ay. 64 - - - - -	32.7
	Wn. 73 - - - - -	36.9 ₁		Main - - - - -	32.3
	Ad. - - - - -	34.7		Ad. - - - - -	32.4
7824	T. - - - - -	50 37 16.3	7850	Ay. - - - - -	42 28 59.0
	R. C. - - - - -	15.9		R. C. - - - - -	60.5
	On. - - - - -	16.5		Arm. - - - - -	57.7
	Ad. - - - - -	16.1		Ay. 64 - - - - -	59.2
7825	T. - - - - -	49 46 3.0		Ad. - - - - -	59.1
	H. - - - - -	1.2	7855	St. - - - - -	49 38 25.0
	R. C. - - - - -	1.4		Arm. - - - - -	24.3
	Arm. - - - - -	1.5		R. C. ₂ - - - - -	24.2
	Ad. - - - - -	1.8		Yarn. - - - - -	25.2
Gr. 3771	R. C. - - - - -	53 10 51.4		Wn. - - - - -	25.3
	Ay. 45 - - - - -	52.5		Ay. 69 - - - - -	25.3
	Ad. - - - - -	52.0		Ay. 72 - - - - -	25.7 ₂
Gr. 3772	R. C. - - - - -	53 18 32.6		Main - - - - -	25.6
	Ay. 45 - - - - -	33.2		Leiden - - - - -	25.1
	Ad. - - - - -	32.9		Eng. - - - - -	25.0
Ll. 43886	H. - - - - -	39 10 25.4		Ad. - - - - -	25.0
	H. C. - - - - -	24.6	7858	H. - - - - -	39 8 14.2
	Ad. - - - - -	25.0		R. C. - - - - -	13.4
XXII, 113	T. - - - - -	31 12 5.3		Pule. - - - - -	13.5
	H. - - - - -	7.3		Ja. - - - - -	15.2
	Pule. - - - - -	5.4		Yarn. - - - - -	13.8
	Arm. - - - - -	5.9		Bonn. - - - - -	16.0 ₁
	Ay. 71 - - - - -	7.0 ₂		Ay. 60 - - - - -	14.6 ₂
	Ad. - - - - -	6.1		Ay. 64 - - - - -	14.2
Gr. 3779	A. Ö. - - - - -	50 51 20.8		Ay. 72 - - - - -	14.5
	R. C. - - - - -	22.3		Ad. - - - - -	14.2
	Arm. - - - - -	19.3	7871	T. - - - - -	55 58 [40.6]
	Ad. - - - - -	20.8		H. - - - - -	42.4
Gr. 3780	R. C. - - - - -	50 56 18.9		R. C. - - - - -	42.2
	Arm. - - - - -	17.9 ₁		Arm. - - - - -	41.8
	Ad. - - - - -	18.6		Wn. - - - - -	43.4
7843	R. C. ₂ - - - - -	31 55 59.4		Ad. - - - - -	42.4
	Ay. 64 - - - - -	56 0.5	7879	Arm. - - - - -	38 58 54.7
	Wn. - - - - -	0.0		Yarn. - - - - -	54.0
	Ay. 71 - - - - -	0.1		Ay. 64 - - - - -	53.3 ₂
	Ay. 72 - - - - -	0.5		Ad. - - - - -	54.2
	Ad. - - - - -	0.1	7880	Arm. - - - - -	38 59 16.0
7845	Pule. - - - - -	47 4 3.9		R. C. ₂ - - - - -	16.3
	R. C. - - - - -	2.8		Ay. 64 - - - - -	15.9
	Arm. - - - - -	2.1		Main - - - - -	17.1 ₂
	Ay. 60 - - - - -	2.2		Yarn. - - - - -	16.5
	R. C. ₂ - - - - -	2.0		Wn. - - - - -	16.6 ₂
	Ad. - - - - -	2.6		Ad. - - - - -	16.4
7846	R. C. - - - - -	53 36 22.7	7882	R. C. - - - - -	49 25 26.1
	Ja. - - - - -	24.3		Ja. - - - - -	26.6
	Yarn. - - - - -	23.0 ₂		Ad. - - - - -	26.3
	Wn. 73 - - - - -	26.4 ₁	7888	Arm. - - - - -	50 54 0.3
	Ad. - - - - -	23.4		On. - - - - -	0.7
7847	R. C. ₂ - - - - -	57 45 52.0		Yarn. - - - - -	0.7
	Ay. 64 - - - - -	52.5		Wn. - - - - -	1.1
	Main 72 - - - - -	51.2 ₂		Ad. - - - - -	0.7
	Ad. - - - - -	52.0			

7824. P. M. + 0".03; c. — o.: Pi. — 0".5; Gr. + 1".1.
7858. Ay. 64 has 16 observations.
7879. In adopting 54".2 I gave Yarn. (15 observations) a weight 1½ and took account of Dembowski's measures in connection with the following star.
7880. Yarnall has 35 observations.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
7894	T. - - - - -	44 32 2.2	7948	R. C. - - - - -	43 53 14.7
	R. C. - - - - -	2.6		Ay. 45 - - - - -	14.4
	Arm. - - - - -	0.7		Arm. - - - - -	13.7
	Wn. - - - - -	1.3		Ja. - - - - -	13.4
	Ad. - - - - -	1.7		Yarn. - - - - -	14.9
				Ad. - - - - -	14.2
Gr. 3843	R. C. - - - - -	43 39 43.1	7950	T. - - - - -	45 33 29.4
	Arm. - - - - -	42.8		R. C. - - - - -	29.4
	Ay. 60 - - - - -	43.4		Arm. - - - - -	29.4
	R. C. ₂ - - - - -	44.6		R. C. ₂ - - - - -	30.1
	Ad. - - - - -	43.5		Yarn. - - - - -	27.5
7901	St. - - - - -	38 24 0.3		Q. - - - - -	29.3 ₁
	Yarn. - - - - -	1.1		Ad. - - - - -	29.2
	Pulc. - - - - -	0.4	7953	R. C. - - - - -	57 49 26.5
	Ay. 72 - - - - -	23 59.7		Arm. - - - - -	25.5
	Ad. - - - - -	24 0.4		Ja. - - - - -	25.7
Gr. 3849	R. C. - - - - -	40 39 45.1		Yarn. - - - - -	26.3
	Arm. - - - - -	47.3		Wn. - - - - -	26.1
	Ad. - - - - -	46.2		Ad. - - - - -	26.0
7906	Arm. - - - - -	43 37 26.1	7961	Pulc. - - - - -	55 14 23.4
	Ay. 60 - - - - -	27.3		R. C. - - - - -	23.9
	R. C. ₂ - - - - -	27.6		Arm. - - - - -	22.9
	Ay. 64 - - - - -	26.7		Ja. - - - - -	23.8
	Ay. 69 - - - - -	26.8		Ay. 60 - - - - -	24.0
	Ad. - - - - -	26.9		Q. - - - - -	24.0 ₃
				Ad. - - - - -	23.6
7913	Ay. 40 - - - - -	44 21 21.0	7962	Pulc. - - - - -	41 17 30.3
	R. C. - - - - -	21.4		Arm. - - - - -	30.7
	Arm. - - - - -	21.8		Ay. 45 - - - - -	31.7
	Wn. - - - - -	21.5		R. C. - - - - -	30.9
	Ad. - - - - -	21.5		Ad. - - - - -	30.9
7915	Arm. - - - - -	39 34 24.2	Gr. 3901	Ay. 40 - - - - -	50 0 55.5
	Pulc. - - - - -	22.5		R. C. - - - - -	55.2
	R. C. - - - - -	23.0		Ad. - - - - -	55.4
	Yarn. - - - - -	23.4	Ll. 44750	A. Ö. - - - - -	48 4 15.3
	Wn. 67 - - - - -	22.0		H. C. - - - - -	14.6
	Wn. 73 - - - - -	22.4		Ad. - - - - -	14.8
	Ad. - - - - -	22.9	7972	Arm. - - - - -	42 38 53.7
7917	R. C. - - - - -	40 53 39.9		Ay. 60 - - - - -	54.4
	Arm. - - - - -	39.0		R. C. ₂ - - - - -	55.1
	Ja. - - - - -	40.3		Ay. 64-71 - - - - -	53.3
	Ad. - - - - -	39.7		Ad. - - - - -	54.1
Gr. 3867	T. - - - - -	43 52 32.3	Gr. 3913	Ay. 40 - - - - -	50 2 30.3
	R. C. - - - - -	33.0		R. C. - - - - -	29.3
	Arm. - - - - -	30.4		Ad. - - - - -	29.8
	Ad. - - - - -	31.9	7978	R. C. - - - - -	39 30 13.2
7931	R. C. - - - - -	38 48 39.5		Ja. - - - - -	14.0
	Arm. - - - - -	38.2		Yarn. - - - - -	13.2
	Ja. - - - - -	40.8		Ad. - - - - -	13.5
	Ad. - - - - -	39.5	7983	Pulc. - - - - -	44 5 5.6
7932	St. - - - - -	41 9 49.8		H. - - - - -	6.1
	Yarn. - - - - -	48.8		R. C. - - - - -	6.4
	Pulc. - - - - -	48.3		Arm. - - - - -	4.7
	Ad. - - - - -	49.0		Ja. - - - - -	7.1
Gr. 3877	R. C. - - - - -	51 51 37.5		Yarn. - - - - -	4.7
	Arm. - - - - -	35.9		Paris - - - - -	4.7 ₃
	Ad. - - - - -	36.7		Ad. - - - - -	5.7

Gr. 3843. P. M. + 0".05 from Gr.
7906. Ay. 64 has weight 1½.
7913. P. M. + 0".03 from Pi. and Gr.
7917. P. M. + 0".07 from Gr.
Gr. 3867. I have corrected T. by -- 37".5, 2 years' precession.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
7984	Pule. - - - - -	39 42 38.8	Gr. 3965	R. C. - - - - -	54 33 49.2
	R. C. - - - - -	38.8		Arm. - - - - -	49.2
	Arm. - - - - -	38.2		Ad. - - - - -	49.2
	Ja. - - - - -	38.0			
	Ay. 71 - - - - -	38.7	8033	R. C. - - - - -	59 46 22.7
	Ay. 73 - - - - -	38.5		Arm. - - - - -	22.7
	Ad. - - - - -	38.5		Oom. - - - - -	21.1
				Ad. - - - - -	22.2
7994	Arm. - - - - -	40 56 13.4	8036	Arm. - - - - -	49 22 21.9
	Yarn. - - - - -	13.6		Q. - - - - -	22.9
	Ay. 64 - - - - -	12.7		Ay. 64 - - - - -	22.1
	Wn. 67 - - - - -	14.0		Wn. - - - - -	22.3
	Ad. - - - - -	13.4		Ad. - - - - -	22.3
7995	Pule. - - - - -	49 4 0.1	8054	Pule. - - - - -	58 44 39.5
	H. - - - - -	3 59.1		Arm. - - - - -	40.6
	R. C. - - - - -	59.0		Yarn. - - - - -	39.7
	Arm. - - - - -	58.2		Ad. - - - - -	39.9
	Ja. - - - - -	59.3			
	Ay. 60 - - - - -	59.0	8056	R. C. - - - - -	45 23 31.5
	Q. 60 - - - - -	4 0.0 ₁		Arm. - - - - -	31.4
	Ad. - - - - -	3 59.2		Ja. - - - - -	31.8
7999	R. C. - - - - -	48 0 59.0		Ay. 64 - - - - -	30.9
	Ay. 45 - - - - -	1 0.2		Yarn. - - - - -	32.8 ₂
	Arm. - - - - -	0 58.8		Ad. - - - - -	31.6
	Ja. - - - - -	0 59.1	Gr. 3990	R. C. - - - - -	59 3 6.7
	Bonn. - - - - -	59.5		Oom. - - - - -	5.7
	Leid. - - - - -	59.7		Ad. - - - - -	6.0
	Ay. 69 - - - - -	59.6	8058	Pule. - - - - -	45 42 45.0
	Ay. 70 - - - - -	59.5		Arm. - - - - -	43.7
	Eng. - - - - -	1 0.0		R. C. - - - - -	46.0
	Ad. - - - - -	0 59.6		Ay. - - - - -	44.1
Gr. 3936	T. - - - - -	38 38 29.1		Paris - - - - -	44.1
	H. - - - - -	28.5		Ad. - - - - -	44.6
	R. C. - - - - -	27.5	8059	Pule. - - - - -	48 36 54.7
	Arm. - - - - -	26.7		Arm. - - - - -	54.1
	Yarn. - - - - -	26.4		R. C. ₂ - - - - -	53.7
	Ad. - - - - -	27.6		Ay. 64 - - - - -	54.6
8013	R. C. - - - - -	59 8 43.6		Ad. - - - - -	54.3
	Arm. - - - - -	43.7	8075	Ay. 40 - - - - -	58 39 17.4
	Ja. - - - - -	44.7		R. C. - - - - -	17.7
	Oom. - - - - -	42.8		Pule. - - - - -	19.1
	Ad. - - - - -	43.7		Arm. - - - - -	18.3
Gr. 3947	R. C. - - - - -	44 42 16.1		R. C. ₂ - - - - -	17.6
	Ay. 45 - - - - -	16.4		Ad. - - - - -	18.0
	Ad. - - - - -	16.2	8076	Pule. - - - - -	42 52 23.0
8023	St. - - - - -	41 39 16.3		Arm. - - - - -	22.5
	Ay. 69 - - - - -	16.2		Yarn. - - - - -	23.1
	Leid. - - - - -	16.1		R. C. ₂ - - - - -	24.0
	Ad. - - - - -	16.2		Ay. 64 - - - - -	22.4
8024	Pule. - - - - -	56 26 3.6		Ad. - - - - -	23.0
	Arm. - - - - -	3.3	8082	Pule. - - - - -	48 43 25.1
	Q. - - - - -	1.8 ₁		Arm. - - - - -	25.9
	Sm. - - - - -	2.9		Ay. 60 - - - - -	24.8
	Ad. - - - - -	3.1		Yarn. - - - - -	24.7
8028	Pule. - - - - -	42 5 8.3		LeV. - - - - -	24.3
	Yarn. - - - - -	8.0		Eng. - - - - -	24.7
	Arm. - - - - -	7.5		Ad. - - - - -	24.9
	Ay. 64 - - - - -	8.3	8083	St. - - - - -	56 28 41.7
	Ad. - - - - -	8.0		Sm. - - - - -	42.6
Gr. 3964	R. C. - - - - -	59 10 50.8		Pule. - - - - -	42.0
	Arm. - - - - -	50.6		Ay. 73 - - - - -	42.2
	Oom. - - - - -	49.8		Ad. - - - - -	42.0
	Ad. - - - - -	50.0			

7995. P. M. — 0".03 from Gr.

Gr. 3936. Groombridge and Piazzi do not agree in declination. P. M. about — 0".10 by Pi. and + 0".03 by Gr. I have used none.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
Gr. 4017	R. C. - - - - -	49 56 16.1	8136	Pulc. - - - - -	37 30 0.2
	Arm. - - - - -	16.7		Arm. - - - - -	29 59.8
	Ad. - - - - -	16.4		R. C. ₂ - - - - -	30 0.0
				Ay. 64 - - - - -	0.8
Gr. 4020	R. C. - - - - -	45 50 39.3		Wn. - - - - -	0.7
	Arm. - - - - -	38.0		Yarn. - - - - -	0.6
	Ad. - - - - -	38.7		Ad. - - - - -	0.3
8107	Arm. - - - - -	52 32 21.1	8139	Arm. - - - - -	37 53 54.5
	Pulc. - - - - -	22.0		Ja. - - - - -	54.8
	Q. - - - - -	23.2		Sm. - - - - -	53.3
	R. C. ₂ - - - - -	22.6		Main 70 - - - - -	52.8 ₁
	Leid. - - - - -	23.3		Ay. 72 - - - - -	54.1 ₁
	Eng. - - - - -	22.7		Ad. - - - - -	54.0
	Ay. 69 - - - - -	22.9			
	Ad. - - - - -	22.7	8141	Arm. - - - - -	31 7 40.9
8110	Pulc. - - - - -	44 29 2.1		Ay. 64 - - - - -	39.8
	R. C. - - - - -	2.4		Pulc. - - - - -	39.1
	Arm. - - - - -	1.7		Ay. 72 - - - - -	39.7
	Ja. - - - - -	4.2		Yarn. - - - - -	42.3 ₂
	Ad. - - - - -	2.6		Ad. - - - - -	40.2
8114	Pulc. - - - - -	48 19 57.7	8153	Arm. - - - - -	59 26 53.5
	Arm. - - - - -	58.0		Ja. - - - - -	54.5
	Ay. 60 - - - - -	56.0		Oom. - - - - -	55.0
	Ad. - - - - -	57.2		Ad. - - - - -	54.3
8115	R. C. - - - - -	44 48 23.6	8156	Arm. - - - - -	31 50 34.4
	Arm. - - - - -	25.8		Q. - - - - -	39.3
	Ja. - - - - -	25.4		R. C. ₂ - - - - -	38.5
	Ad. - - - - -	24.9		Ay. 64 - - - - -	38.3
				Ad. - - - - -	38.6
8118	Arm. - - - - -	41 5 27.5	Gr. 4052	R. C. - - - - -	40 55 37.2
	R. C. - - - - -	27.6		Rü. - - - - -	35.8 ₁
	Pulc. - - - - -	27.8		H. C. - - - - -	37.4
	Ay. 64-71 - - - - -	28.8		Ad. - - - - -	37.0
	Ad. - - - - -	27.9	8158	R. C. - - - - -	56 50 58.9
8125	Arm. - - - - -	47 56 [21.0]		Arm. - - - - -	58.8
	Ay. 64 - - - - -	24.0		Ja. - - - - -	60.0
	Ay. 69 - - - - -	23.4		Yarn. - - - - -	58.4 ₂
	Eng. - - - - -	23.9		Ad. - - - - -	59.0
	Ad. - - - - -	23.8	8159	Arm. - - - - -	31 41 55.1
8126	Arm. - - - - -	47 41 46.5		Q. - - - - -	54.9
	R. C. - - - - -	44.8		R. C. ₂ - - - - -	53.8
	Ay. 64 - - - - -	46.7		Ay. 64 - - - - -	55.0
	Ay. 69 - - - - -	46.6		Yarn. - - - - -	54.2
	Leid. - - - - -	46.5		Wn. 73 - - - - -	54.0
	Eng. - - - - -	46.0		Ad. - - - - -	54.5
	Ay. 72-3 - - - - -	45.8 ₂	8171	R. C. - - - - -	42 13 27.1
	Ad. - - - - -	46.2		Ay. 45 - - - - -	27.1
8128	Arm. - - - - -	41 23 38.6		Pulc. - - - - -	26.3
	R. C. - - - - -	39.1		Yarn. - - - - -	24.8
	Ay. 64 - - - - -	37.9		Ad. - - - - -	26.3
	Wn. 73 - - - - -	38.5	Gr. 4074	R. C. - - - - -	45 46 37.6
	Ad. - - - - -	38.5		Arm. - - - - -	37.3
				Ad. - - - - -	37.0
8135	R. C. - - - - -	43 25 59.3	8188	T. - - - - -	57 51 37.0
	Arm. - - - - -	26 1.4		R. - - - - -	35.3
	Ja. - - - - -	25 59.6		R. C. - - - - -	36.1
	Sm. - - - - -	26 0.7		Ay. 45 - - - - -	35.7
	Ad. - - - - -	0.1		Arm. - - - - -	35.7
Gr. 4043	R. C. - - - - -	59 35 26.3		Ay. 60 - - - - -	35.4
	Oom. - - - - -	26.7		Ay. 64 - - - - -	36.5
	Ad. - - - - -	26.5		Ad. - - - - -	35.9

Gr. 4043. P. M. — 0".03, Gr.

8139. Later Greenwich observations give about 1" less.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
8195	Arm. - - - - -	38 32 59.8	8245	Ay. 40 - - - - -	44 17 58.7
	R. C. ₂ - - - - -	58.5		R. C. - - - - -	58.2
	Ay. 64 - - - - -	58.0		Ja. - - - - -	58.9
	Ay. 72 - - - - -	59.3		Q. - - - - -	56.8
	Ay. 73 - - - - -	58.9		Ad. - - - - -	58.2
	Main - - - - -	60.2	8252	Arm. - - - - -	52 27 32.5
	Wn. 73 - - - - -	59.9		Yarn. - - - - -	33.2
	Ad. - - - - -	59.3		Ay. 68 - - - - -	33.5
Gr. 4083	T. - - - - -	43 22 57.4		Sm. - - - - -	33.3
	R. C. - - - - -	56.8		Ad. - - - - -	33.0
	Rii. - - - - -	55.3	Arg. 246	Arg. - - - - -	57 22 12.1
	Arm. - - - - -	55.6		Ad. - - - - -	12.1
	Ad. - - - - -	56.3	Gr. 4136	T. - - - - -	55 6 21.7
8206	St. - - - - -	30 38 7.5		R. C. - - - - -	21.7
	Ay. 64 - - - - -	7.8		Pulc. - - - - -	22.4
	Pulc. - - - - -	7.3		Arm. - - - - -	20.9
	Main - - - - -	7.2		Ad. - - - - -	21.7
	Wn. 73 - - - - -	8.5	8261	Pulc. - - - - -	45 43 34.7
	Ad. - - - - -	7.6		Arm. - - - - -	34.9
8211	Pulc. - - - - -	32 48 20.5		Ay. 60 - - - - -	34.9
	Arm. - - - - -	22.0		Ad. - - - - -	34.8
	Ay. 64 - - - - -	20.8	8268	Arm. - - - - -	57 57 21.7
	Main - - - - -	20.7		Ay. 60 - - - - -	20.6
	Ad. - - - - -	21.0		Ay. 64 - - - - -	20.8
8212	Arm. - - - - -	39 32 51.8		Yarn. - - - - -	20.2
	R. C. - - - - -	51.1		Ad. - - - - -	20.8
	Ay. 72 - - - - -	50.4	Gr. 4139	R. C. - - - - -	46 8 18.0
	Ad. - - - - -	51.1		Arm. - - - - -	18.3
8223	R. C. - - - - -	43 44 17.3		Ad. - - - - -	18.1
	Yaro. - - - - -	15.7 ₂	8280	Arm. - - - - -	59 17 1.3 ₂
	Ay. 68 - - - - -	15.9		Yarn. - - - - -	1.0 ₃
	Ad. - - - - -	16.4		Oom. - - - - -	0.8
8224	St. - - - - -	45 46 51.7		Sm. - - - - -	0.1
	R. C. ₂ - - - - -	50.2		Wn. 72 - - - - -	0.9
	Paris - - - - -	51.4		Ad. - - - - -	0.8
	Ad. - - - - -	51.3	8282	Pulc. - - - - -	58 16 7.2
8229	St. - - - - -	42 34 34.3		Arm. - - - - -	6.1
	Ay. 64 - - - - -	33.9		Ja. - - - - -	8.4
	Ay. 68 - - - - -	34.2		Ay. 64-68 - - - - -	7.1
	Yarn. - - - - -	33.7		Ad. - - - - -	7.2
	Paris - - - - -	34.5	8289	T. - - - - -	50 55 38.8
	Ad. - - - - -	34.1		R. - - - - -	41.0
Gr. 4110	R. C. - - - - -	57 57 46.0		R. C. - - - - -	39.9
	Arm. - - - - -	46.1		On. - - - - -	39.5
	Ad. - - - - -	46.0		Arm. - - - - -	39.2
8231	Pulc. - - - - -	49 46 47.0		R. C. ₂ - - - - -	39.3
	Arm. - - - - -	47.0		Ad. - - - - -	39.6
	On. - - - - -	47.2	8307	T. - - - - -	50 49 37.0
	Ad. - - - - -	47.0		R. C. - - - - -	39.5
8237	Ay. 42 - - - - -	43 38 32.4		On. - - - - -	38.4
	R. C. - - - - -	31.8		Arm. - - - - -	37.7
	Pulc. - - - - -	31.6		Wn. 73 - - - - -	37.6
	Pulc. M. C. - - - - -	30.9		Ad. - - - - -	37.8
	Ay. 60 - - - - -	30.7	8310	St. - - - - -	56 49 14.1
	Ad. - - - - -	31.5		Y. - - - - -	13.7
Gr. 4125	R. C. - - - - -	48 49 12.3		Pulc. - - - - -	13.6
	Rii. - - - - -	10.6 ₁		Ad. - - - - -	13.8
	Arm. - - - - -	13.2	8316	T. - - - - -	52 2 19.7
	Ad. - - - - -	12.3		R. - - - - -	19.3
				H. - - - - -	19.3
				R. C. - - - - -	20.7
				Arm. - - - - -	21.1
				Ad. - - - - -	20.0

8229. Professor Yarnall's value is taken from the *second* edition of his catalogue.

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
8317	Arm. - - - - -	56 42 58.5	Gr. 4237	Ril. - - - - -	39 27 11.3 ₂
	Pulc. - - - - -	58.9		R. C. - - - - -	10.3
	Yarn. - - - - -	60.2		Arm. - - - - -	10.7
	Ay. 64 - - - - -	58.4		Ad. - - - - -	10.7
	Ad. - - - - -	59.0			
Gr. 4172	H. - - - - -	41 57 45.2 ₁	7	St. - - - - -	58 27 36.4
	R. C. - - - - -	45.3		R. C. ₂ - - - - -	36.2
	Pulc. - - - - -	45.1 ₂		Wn. - - - - -	[34.3]
	Arm. - - - - -	44.3		Main - - - - -	36.0
	Ad. - - - - -	44.9		Ay. 71-72 - - - - -	37.5
				Ad. - - - - -	36.4
8322	R. C. - - - - -	55 0 38.3	Gr. 4243	R. C. - - - - -	45 41 34.2
	Pulc. - - - - -	36.9		Arm. - - - - -	33.2
	Arm. - - - - -	37.2		Ad. - - - - -	33.7
	Ay. 40 - - - - -	39.4			
	Ad. - - - - -	37.9	13	R. C. - - - - -	45 41 43.0
8326	T. - - - - -	49 44 35.5		Arm. - - - - -	42.3
	H. - - - - -	35.6		Ja. - - - - -	45.5
	R. C. - - - - -	35.4		Ad. - - - - -	43.6
	Ay. 45 - - - - -	34.7			
	Ad. - - - - -	35.3	Gr. 2	R. C. - - - - -	51 33 34.8
				Arm. - - - - -	36.0 ₁
8330	Ay. - - - - -	55 3 33.0		Ad. - - - - -	35.2
	R. C. - - - - -	32.9			
	Pulc. - - - - -	32.4	16	St. - - - - -	45 22 35.7
	Arm. - - - - -	33.1		Pulc. - - - - -	35.3
	Yarn. - - - - -	33.4 ₂		Main - - - - -	35.1
	Main - - - - -	31.5		Ad. - - - - -	35.4
	Ad. - - - - -	32.7			
Gr. 4190	T. - - - - -	49 50 1.5	18	Arm. - - - - -	58 58 [35.9]
	R. C. - - - - -	0.7		Pulc. - - - - -	39.9
	Ay. 45 - - - - -	3.0		Sm. - - - - -	38.7
	Ad. - - - - -	1.7		Ad. - - - - -	39.3
R.C. 6254	R. C. - - - - -	58 51 52.5	Gr. 9	R. C. - - - - -	47 27 22.4
	Oom. - - - - -	52.3		Arm. - - - - -	21.9
	Ad. - - - - -	52.4		Ad. - - - - -	22.1
8345	Pulc. - - - - -	41 40 16.7	Gr. 13	R. C. - - - - -	44 0 45.7
	H. - - - - -	17.2		Arm. - - - - -	45.4
	R. C. - - - - -	15.4		Ad. - - - - -	45.1
	Ja. - - - - -	16.7			
	Ad. - - - - -	16.5	28	Yarn. - - - - -	40 20 42.5 ₂
Gr. 4207	R. C. - - - - -	42 3 7.5		Arg. - - - - -	43.8
	Ay. 45 - - - - -	7.5		Ay. 64 - - - - -	42.1
	Ay. 64 - - - - -	7.6		Sm. - - - - -	43.0
	Ad. - - - - -	7.6		Wn. 73 - - - - -	42.6
				Ad. - - - - -	42.8
Gr. 4216	R. C. - - - - -	49 10 27.5	Gr. 24	T. - - - - -	40 20 10.5
	Ay. 60 - - - - -	27.7		R. C. - - - - -	10.8
	Ad. - - - - -	27.6		Arm. - - - - -	11.4
				Ad. - - - - -	10.9
8364	R. C. - - - - -	57 50 9.9	51	Ril. - - - - -	47 15 7.1
	Arm. - - - - -	10.0		R. C. - - - - -	6.2
	Pulc. - - - - -	9.2		Arm. - - - - -	7.0
	Ay. 68 - - - - -	9.9		Ja. - - - - -	9.1
	Sm. - - - - -	9.8		H. C. - - - - -	7.3
	Ad. - - - - -	9.8		Ad. - - - - -	7.3
8372	R. C. - - - - -	57 44 22.7	52	Arm. - - - - -	37 59 15.6
	Pulc. - - - - -	23.4		R. C. ₂ - - - - -	15.5
	Arm. - - - - -	22.7		Pulc. - - - - -	15.1
	Yarn. - - - - -	22.5		Yarn. - - - - -	15.0
	Sm. - - - - -	22.1		Ay. 71 - - - - -	15.1
	Ad. - - - - -	22.7		Ad. - - - - -	15.3

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
54	Ay. 40 - - - - -	50 44 19.4	100	T. - - - - -	43 42 10.1
	R. C. - - - - -	19.5		R. C. - - - - -	10.6
	Arm. - - - - -	18.1		Arm. - - - - -	9.3
	Ja. - - - - -	19.3		Paris - - - - -	9.9 ₂
	Ad. - - - - -	19.1		Ad. - - - - -	10.0
58	Arm. - - - - -	36 5 31.7	Gr. 74	T. - - - - -	43 15 22.6
	Pule. - - - - -	30.9		Ay. 40 - - - - -	21.6
	Ay. 64-71 - - - - -	30.8		R. C. - - - - -	21.7
	Main - - - - -	32.2		Ad. - - - - -	22.0
	Wn. - - - - -	32.8	120	H. - - - - -	32 53 30.6
	Ad. - - - - -	31.5		Arm. - - - - -	29.1 ₁
60	Arm. - - - - -	43 5 48.7		Ja. - - - - -	28.3
	Pule. - - - - -	48.6		H. C. - - - - -	29.7
	Ay. 60 - - - - -	48.9		Ay. 64 - - - - -	29.5
	Wn. 67 - - - - -	47.7		Main - - - - -	29.6
	Ad. - - - - -	48.5		Sm. - - - - -	29.0
				Ad. - - - - -	29.4
67	Arm. - - - - -	37 16 33.9	121	Pule. - - - - -	53 49 54.5
	Pule. - - - - -	33.4		Arm. - - - - -	54.7
	Yarn. - - - - -	34.9		Ay. 60 - - - - -	54.9
	Ay. 64 - - - - -	33.6		Main - - - - -	54.8 ₂
	Ay. 68-69 - - - - -	34.3		Wn. 73 - - - - -	55.2
	Leid. - - - - -	33.3		Ad. - - - - -	54.8
	Eng. - - - - -	34.2	123	Ay. 40 - - - - -	53 7 29.4
	Ay. 72 - - - - -	33.6		R. C. - - - - -	28.4
	Ad. - - - - -	33.9		Arm. - - - - -	29.2 ₁
Gr. 55	R. C. - - - - -	53 57 7.4		Ja. - - - - -	29.3
	Arm. - - - - -	7.5		Ad. - - - - -	29.1
	Rii. 2 - - - - -	7.9	Gr. 86	R. C. - - - - -	53 25 52.3
	Ad. - - - - -	7.5		Ay. 50 - - - - -	52.7 ₁
78	R. C. - - - - -	43 34 17.0		Ad. - - - - -	52.4
	Ay. 45 - - - - -	16.7	Gr. 96	T. - - - - -	53 30 48.9
	Arm. - - - - -	16.0		R. C. - - - - -	49.9
	Ja. - - - - -	18.1		Arm. - - - - -	50.4 ₁
	LeV. 64 - - - - -	18.1		Ay. 60 - - - - -	50.0
	Ad. - - - - -	17.2		Ad. - - - - -	49.7
79	R. C. - - - - -	51 19 37.8	146	Arm. - - - - -	53 28 44.0
	Arm. - - - - -	37.0		Pule. - - - - -	46.1
	Ja. - - - - -	39.4		Ay. 60 - - - - -	45.8
	Ay. 64 - - - - -	37.2		Wn. 73 - - - - -	46.8
	Ad. - - - - -	37.8		Ad. - - - - -	45.7
83	Pule. - - - - -	52 21 14.4	148	R. C. - - - - -	59 38 15.4
	Arm. - - - - -	14.0		Arm. - - - - -	14.4
	Ja. - - - - -	15.4		Ja. - - - - -	15.6
	Yarn. - - - - -	14.3		Oom. - - - - -	14.6
	Sm. - - - - -	14.8		LeV. - - - - -	14.9
	Ad. - - - - -	14.6		Ad. - - - - -	15.0
R. C. 93	R. C. - - - - -	56 5 18.5	152	Pule. - - - - -	43 47 54.2
	Arm. - - - - -	18.0		Rii. - - - - -	55.3 ₁
	Ad. - - - - -	18.3		R. C. - - - - -	55.1
92	Arm. - - - - -	55 56 56.8		R. - - - - -	54.1
	Pule. - - - - -	56.4		Ay. 60 - - - - -	55.7
	Yarn. - - - - -	56.8		Ad. - - - - -	54.8
	Ay. 68 - - - - -	55.4	153	St. - - - - -	53 12 30.6
	Wn. 73 - - - - -	55.1		Wn. - - - - -	31.9
	Ad. - - - - -	56.1		Ay. - - - - -	31.5
Gr. 64	R. C. - - - - -	49 17 37.7		Leid. - - - - -	31.0
	Rii. 2 - - - - -	36.6		Eng. - - - - -	30.7
	Ay. 60 - - - - -	38.3		Yarn. - - - - -	30.4 ₂
	Yarn. - - - - -	36.2		Ad. - - - - -	31.0
	Ad. - - - - -	37.2			

121. Arm. corrected by $-10''$.
Gr. 96. P. M. $-0''.03$ (Pi., Gr.).

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
155	St. - - - - -	33 1 51.9	197	Arm. - - - - -	47 10 43.4
	Yarn. - - - - -	50.0 ₂		R. C. - - - - -	41.9
	Ay. 72 - - - - -	51.6 ₂		Ja. - - - - -	43.8
	Ad. - - - - -	51.4		Ay. 64 - - - - -	43.9
				Sm. - - - - -	43.1
				Ad. - - - - -	43.2
158	Arm. - - - - -	34 42 42.7	198	St. - - - - -	47 35 59.6
	Ay. - - - - -	41.5		Ay. 69 - - - - -	59.0
	Main - - - - -	41.9		Leid. - - - - -	60.0
	Wn. - - - - -	41.3		Eng. - - - - -	60.0
	Yarn. - - - - -	41.3		Pulc. - - - - -	59.0
	Ad. - - - - -	41.7		Ad. - - - - -	59.5
Gr. 108	R. C. - - - - -	59 38 13.4	201	R. C. - - - - -	54 32 11.8
	Arm. - - - - -	12.6 ₁		Arm. - - - - -	12.2
	Oom. - - - - -	12.8		Wn. 73 - - - - -	11.7
	Ad. - - - - -	13.0		Ad. - - - - -	11.9
165	R. C. - - - - -	48 40 1.1	Gr. 142	T. - - - - -	50 45 43.6
	Arm. - - - - -	1.2		R. C. - - - - -	45.3
	Ja. - - - - -	2.0		Arm. - - - - -	42.8
	Ay. 64 - - - - -	0.5 ₁		Rü. 2 - - - - -	44.3 ₁
	Ay. 68 - - - - -	1.9		On. - - - - -	44.4
	Ad. - - - - -	1.4		Main - - - - -	43.6 ₂
				Ad. - - - - -	44.0
166	St. - - - - -	30 10 35.9	218	St. - - - - -	57 9 7.8
	Yarn. - - - - -	36.7		R. C. ₂ - - - - -	7.4
	Ay. 72 - - - - -	36.4		Ay. 64 - - - - -	8.2
	Wn. 73 - - - - -	36.0		Eng. - - - - -	7.8
	Ad. - - - - -	36.1		Arg. - - - - -	8.3
173	Arm. - - - - -	38 46 20.2		Sm. - - - - -	7.5
	Yarn. - - - - -	20.2		Ay. - - - - -	8.5
	Pulc. - - - - -	19.6		Main - - - - -	7.5
	R. C. ₂ - - - - -	20.5		Ad. - - - - -	7.7
	Ay. 64 - - - - -	20.3	219	Arm. - - - - -	50 17 8.0
	Wn. 73 - - - - -	19.1		Pulc. - - - - -	9.2
	Ad. - - - - -	20.0		Yarn. - - - - -	8.4
180	Arm. - - - - -	49 49 35.7		Ay. 60 - - - - -	10.0
	Bonn. - - - - -	35.5		Ad. - - - - -	8.9
	Ay. 64 - - - - -	36.0	226	R. C. - - - - -	47 4 58.0
	Wn. - - - - -	35.8		Ja. - - - - -	59.1
	Leid. - - - - -	36.0		Ad. - - - - -	58.6
	Eng. - - - - -	35.8	227	Arm. - - - - -	40 23 52.3
	Ay. 69 - - - - -	35.6		Pulc. - - - - -	52.2
	Ad. - - - - -	35.8		Yarn. - - - - -	52.0
181	Arm. - - - - -	40 0 16.6		Ay. 72 - - - - -	53.0 ₂
	Pulc. - - - - -	17.9		Paris - - - - -	52.3
	Ja. - - - - -	18.1		Ad. - - - - -	52.3
	Ay. 64 - - - - -	16.4	232	R. C. - - - - -	50 49 38.3
	Ad. - - - - -	17.2		On. - - - - -	37.1
182	Pulc. - - - - -	58 4 3.9		Arm. - - - - -	36.1
	Arm. - - - - -	4.8		R. C. ₂ - - - - -	37.0 ₁
	Main - - - - -	4.7		Wn. 73 - - - - -	36.7
	Ad. - - - - -	4.5		Ad. - - - - -	37.0
Gr. 125	R. C. - - - - -	51 39 5.6	235	R. C. - - - - -	50 53 27.9
	Arm. - - - - -	4.2		Arm. - - - - -	26.6
	Ad. - - - - -	4.9		On. - - - - -	26.6
189	Arm. - - - - -	46 20 25.5		Wn. 73 - - - - -	27.6
	Pulc. - - - - -	26.8		Ad. - - - - -	27.2
	Ay. 60 - - - - -	26.4	244	Arm. - - - - -	58 17 41.9
	Leid. - - - - -	25.4		Yarn. - - - - -	43.5
	Eng. - - - - -	26.0		Pulc. - - - - -	42.6
	Ay. 68-9 - - - - -	24.7		Ad. - - - - -	42.7
	Ad. - - - - -	25.8			

DETAILS OF POSITIONS—DIVISION IV.

177

No.	Authority.	Declination.			No.	Authority.	Declination.		
		°	'	"			°	'	"
245	R. C.	47	59	59.9	314	Ay. 40	54	18	20.9
	Ay. 50	48	0	1.7		Ay. 45			20.1
	Ja.			0.8		R. C.			21.5
	Ay. 60-64			0.0		Pule.			21.1 ₃
	Bonn.			1.4		Ay. 60			22.3
	Ay. 69			0.3		Paris			22.5
	Leid.			1.6		Ad.			21.3
	Eng.			1.2	318	Arm.	43	16	30.6
	Ad.			1.0		R. C.			30.8
254	T.	58	30	20.8		Pule.			32.3
	Pule.			18.3		Ay. 60			32.1
	R. C.			18.8		R. C. ₂			32.1
	Arm.			17.9		Ad.			31.6
	Ay. 68			18.5	321	Arm.	31	20	40.6
	Ad.			18.7		Pule.			39.4
255	R. C.	59	41	8.7		R. C.			37.9
	Ja.			9.1		Ay. 64			40.1
	Oom.			7.3		Ad.			39.5
	Ad.			8.4	330	Arm.	46	34	27.5
259	St.	37	49	15.3		R. C.			28.4
	R. C. ₂			14.9		Ay. 60			29.0
	Ay. 64			15.1		Ad.			28.3
	Ay. 68-9			14.8	334	St.	34	57	26.8
	Eng.			16.0		R. C. ₂			26.7
	Arg.			15.9		Ay. 64			26.7
	Main			15.7		Ay. 69			26.7
	Sm.			15.6		Eng.			26.1
	Ay. 70-1-2			15.3		Yarn.			25.8
	Main			15.4		Arg.			26.6
	Ad.			15.4		Ay. 71			26.9
						Main 71			25.8
						Ad.			26.5
283	Arm.	40	40	22.6	337	Pule.	41	24	57.4
	Pule.			22.5		R. C.			58.0
	R. C.			22.5		A m.			57.2
	Wn.			21.0		Ay. 64			58.1
	Ad.			22.2		Ad.			57.7
285	Arm.	31	7	57.2	339	R. C.	54	29	2.7
	Pule.			56.2		Ay. 60			3.3
	Paris			57.1		R. C. ₂			3.2
	Main			58.0		Yarn.			4.8 ₃
	Ay. 71			57.4 ₂		Ad.			3.4
	Ad.			57.2	343	Arm.	37	3	30.6
290	Pule.	53	32	4.3		Yarn.			30.1
	Arm.			3.7		R. C. ₂			30.2
	R. C. ₂			4.9		Ay. 64			29.8
	Yarn.			3.5		Ad.			30.1
	Ay.			4.5	345	Arm.	30	45	33.2 ₁
	Sm.			4.5		Pule.			33.0
	Ad.			4.2		Ay. 64			34.2
297	Ay. 40	39	19	16.6		Main			32.4
	R. C.			13.4		Ad.			33.2
	Ja.			14.8	352	T.	44	40	18.5
	Ad.			14.9		Ay. 45			19.1
310	Arm.	31	30	42.5		R. C.			18.4
	Pule.			43.2		R. C. ₂			18.1
	Ay. 64			44.0		Ay. 64			18.0
	Main			44.0		Ad.			18.4
	Ay. 71-72			44.7	357	H.	31	21	42.1
	Main 71-72			44.2		Main			42.1
	Ad.			43.8		Sm.			42.2
Gr. 241	T.	48	53	11.4		Main 74			40.8
	R. C.			10.5		Ad.			41.8
	Ay. 60			11.2					
	Ad.			11.0					

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
377	R. C. - - - - -	42 16 48.2	456	Ay. - - - - -	58 35 22.0
	Ja. - - - - -	47.0		R. C. - - - - -	21.8
	Ad. - - - - -	47.6		Pule. - - - - -	22.6
				Arm. - - - - -	22.6
				Ad. - - - - -	22.3
390	T. - - - - -	57 32 60.1	465	C. A. - - - - -	36 35 44.5
	Ay. - - - - -	58.6		T. - - - - -	44.1
	R. C. - - - - -	59.4		Arm. - - - - -	44.6
	Arm. - - - - -	59.7		Bonn. - - - - -	43.9
	Ad. - - - - -	59.5		Ay. 64 - - - - -	44.1
				Ay. 72 - - - - -	44.1
				Ad. - - - - -	44.2
391	Ay. 40 - - - - -	57 34 26.4	474	Arm. - - - - -	48 5 1.2
	12-yr., 45 - - - - -	25.5		R. C. - - - - -	0.5
	R. C. - - - - -	25.6		Ay. 64-68 - - - - -	0.2 ₂
	Arm. - - - - -	25.0		LeV. - - - - -	1.2
	6-yr. - - - - -	26.1 ₂		Ad. - - - - -	0.8
	Paris - - - - -	25.4			
	Ad. - - - - -	25.6			
Gr. 294	R. C. - - - - -	42 51 8.7	480	Arm. - - - - -	40 46 47.3
	Arm. - - - - -	8.4		Ay. 45 - - - - -	46.5
	Ad. - - - - -	8.6		R. C. - - - - -	46.1
Gr. 297	R. C. - - - - -	49 27 58.6		R. C. ₂ - - - - -	46.7 ₂
	Arm. - - - - -	57.4		Ay. 71 - - - - -	46.1 ₁
	Ad. - - - - -	58.0		Yarn. - - - - -	47.9 ₂
				Ad. - - - - -	46.7
Pi. I, 50	T. - - - - -	42 55 44.9	482	R. C. - - - - -	57 20 23.7
Gr. 299	R. C. - - - - -	44.5		Arm. - - - - -	22.6
	Arm. - - - - -	44.0		Ay 50 - - - - -	22.8
	Ad. - - - - -	44.5		Ja. - - - - -	22.3
				Sm. - - - - -	22.6
404	Arm. - - - - -	44 52 22.4		Yarn. - - - - -	24.3 ₂
	Ay. 60 - - - - -	23.4		Ad. - - - - -	22.7
	Ay. 64 - - - - -	23.0	487	St. - - - - -	47 59 38.5
	Yarn. - - - - -	23.2 ₂		R. C. ₂ - - - - -	38.0
	Ay. 68-71 - - - - -	22.9 ₂		Arg. - - - - -	38.8
	Paris - - - - -	23.0		Eng. - - - - -	37.6
	Ad. - - - - -	23.0		Leid. - - - - -	38.6
409	Pule. - - - - -	37 3 42.2		Ay. 69 - - - - -	38.4
	Arm. - - - - -	41.9		Eng. ₂ - - - - -	38.6
	R. C. ₂ - - - - -	42.3		Yarn. - - - - -	38.6
	Ay. 64 - - - - -	42.3		Main - - - - -	39.0
	Ad. - - - - -	42.2		Ad. - - - - -	38.4
416	Pule. - - - - -	59 35 5.4	492	Arm. - - - - -	43 44 57.5
	Ay. 50 - - - - -	5.2		R. C. - - - - -	56.7
	R. C. ₂ - - - - -	3.7		Ay. 64 - - - - -	57.8
	Oom. - - - - -	4.6		Paris - - - - -	57.3
	Yarn. - - - - -	5.4 ₂		Ad. - - - - -	57.3
	Ad. - - - - -	5.0	Gr. 357	T. - - - - -	53 13 60.0
425	T. - - - - -	42 48 31.7		R. C. - - - - -	58.8
	R. C. - - - - -	30.1		Arm. - - - - -	58.9
	Pule. - - - - -	31.8		Ad. - - - - -	59.2
	Ay. 60 - - - - -	31.2	501	R. C. - - - - -	42 39 52.9
	Ad. - - - - -	31.2		Ja. - - - - -	53.3
432	Arm. - - - - -	44 45 37.5		Pule. - - - - -	52.9
	Ay. - - - - -	38.3		Ad. - - - - -	53.1
	R. C. - - - - -	37.5	502	Arm. - - - - -	39 56 35.1
	R. C. ₂ - - - - -	36.2		R. C. ₂ - - - - -	35.0
	Ad. - - - - -	37.4		Ay. 64 - - - - -	35.6 ₁₇
Gr. 317	R. C. - - - - -	43 24 1.0		Wn. 67 - - - - -	34.6
	Arm. - - - - -	0.4		Ay. 68 - - - - -	35.9
	Ad. - - - - -	0.7		Ay. 71 - - - - -	35.9
				Ad. - - - - -	35.4
441	Arm. - - - - -	46 21 41.8	508	Ay. 40 - - - - -	57 59 41.7
	R. C. - - - - -	41.1		Arm. - - - - -	40.3
	Ay. 64 - - - - -	41.8		Pule. - - - - -	42.0
	Ay. 68 - - - - -	42.0 ₂		Ad. - - - - -	41.3
	Ad. - - - - -	41.7			

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
510	C. A. - - - - -	41 59 8.1	555	La1. - - - - -	51 18 59.9
	R. C. - - - - -	7.1		Pi. - - - - -	58.1
	Arm. - - - - -	6.0 ₂		Gr. - - - - -	58.4
	R. C. ₂ - - - - -	7.2 ₁		Ay. - - - - -	57.3
	Ay. 69 - - - - -	7.2		R. C. - - - - -	58.3
	Leid. - - - - -	7.5		Arm. - - - - -	59.2
	Eng. - - - - -	7.7		R. C. ₂ - - - - -	57.5
	Ad. - - - - -	7.3		Q. - - - - -	58.8
				Ad. - - - - -	58.0
509	T. - - - - -	59 54 54.5	558	Ay. 40 - - - - -	54 31 38.6
	Ay. 40 - - - - -	55.4		Arm. - - - - -	39.4
	R. C. - - - - -	55.3		R. C. - - - - -	37.6
	Arm. - - - - -	56.3		Pulc. - - - - -	38.0 ₂
	R. C. ₂ - - - - -	55.5 ₁		Ad. - - - - -	38.4
	Ad. - - - - -	55.4			
516	C. A. - - - - -	34 36 51.2	560	Arm. - - - - -	50 10 25.9
	Ja. - - - - -	51.1		Pulc. - - - - -	26.1
	Ay. 64 - - - - -	50.7		On. - - - - -	25.9
	Main - - - - -	50.8		Ay. 50 - - - - -	26.4
	Sm. - - - - -	50.4		Ad. - - - - -	26.1
	Yarn. - - - - -	51.0			
	Main 70 - - - - -	50.9	562	Arm. - - - - -	50 51 21.3
	Ad. - - - - -	50.7		R. C. - - - - -	23.1
515	Arm. - - - - -	59 55 10.6		Ja. - - - - -	22.7
	R. C. - - - - -	11.0		Yarn. - - - - -	[19.9 ₂]
	R. C. ₂ - - - - -	10.5 ₁		Sm. 59 - - - - -	21.2
	Ay. 71 - - - - -	11.5 ₁		Ay. 64 - - - - -	23.0
	Ad. - - - - -	10.9		Sm. 65 - - - - -	22.2
				Ad. - - - - -	22.2
522	St. - - - - -	50 3 28.6	566	Arm. - - - - -	40 6 42.3 ₂
	R. C. ₂ - - - - -	2.5		R. C. - - - - -	42.2
	Leid. - - - - -	29.0		Ay. 64 - - - - -	43.2
	Eng. - - - - -	28.8		Wn. 67 - - - - -	42.7
	Ay. 70 - - - - -	29.2		Ad. - - - - -	42.6
	Ad. - - - - -	28.8			
525	Arm. - - - - -	56 54 25.6	Gr. 400	R. C. - - - - -	40 2 24.6
	Bonn. - - - - -	26.5 ₂		Arm. - - - - -	23.6
	Sm. 59 - - - - -	24.6		Ad. - - - - -	24.1
	Sm. 65 - - - - -	25.3			
	Main - - - - -	25.4	575	Arm. - - - - -	40 5 19.3
	Ad. - - - - -	25.5		Ja. - - - - -	19.6
Gr. 374	R. C. - - - - -	45 20 39.9		Pulc. - - - - -	19.4
	Arm. - - - - -	39.3		R. C. - - - - -	19.7
	Ad. - - - - -	39.6		Ad. - - - - -	19.5
540	T. - - - - -	45 36 20.1	576	Wn. - - - - -	36 30 47.1
	R. - - - - -	20.1		Yarn. - - - - -	48.5 ₂
	R. C. - - - - -	20.8		LeV. - - - - -	47.9
	Arm. - - - - -	20.5		Main - - - - -	48.4
	R. C. ₂ - - - - -	21.6		Ad. - - - - -	47.9
	LeV. - - - - -	21.3			
	Ad. - - - - -	20.7	579	Yarn. - - - - -	36 39 50.2
544	C. A. - - - - -	37 19 48.4		Arm. - - - - -	49.8
	T. - - - - -	46.2		R. C. ₂ - - - - -	[48.3 ₁]
	R. - - - - -	45.9		Ay. 64 - - - - -	49.9
	Arm. - - - - -	45.5		Main - - - - -	50.1
	R. C. ₂ - - - - -	45.9		Ay. 72 - - - - -	50.6 ₂
	Ay. 64 - - - - -	46.5		Ad. - - - - -	50.1
	Ay. 70 - - - - -	46.15 ₂			
	Ad. - - - - -	46.5	580	Arm. - - - - -	36 38 15.3
547	R. C. - - - - -	47 16 23.9		Yarn. - - - - -	15.8
	Arm. - - - - -	23.6		R. C. ₂ - - - - -	15.0
	Ja. - - - - -	25.5		Ay. 64-72 - - - - -	15.4 ₂
	Yarn. - - - - -	24.4		Main - - - - -	15.9
	Sm. - - - - -	24.1		Ad. - - - - -	15.5
	Ad. - - - - -	24.3			

No.	Authority.	Declination.	No.	Authority.	Declination.
		° ' "			° ' "
587	T. - - - - -	46 29 3.1	624	Arm. - - - - -	32 40 49.7
	R. - - - - -	1.1		Pulc. - - - - -	49.2
	R. C. - - - - -	2.5		Ay. 64-72 - - - - -	50.3
	Arm. - - - - -	3.5		Ad. - - - - -	49.8
	Ad. - - - - -	2.6			
590	Arm. - - - - -	48 35 30.7	628	St. - - - - -	41 43 43.8
	Ay. 45 - - - - -	31.2		R. C. - - - - -	43.0
	R. C. - - - - -	30.1		Ay. 64 - - - - -	43.6
	Pulc. - - - - -	30.3		Wn. - - - - -	43.0
	Ad. - - - - -	30.6		Ay. 69 - - - - -	44.1
				Ay. 71 - - - - -	43.5
				Main 72 - - - - -	42.1
				Ad. - - - - -	43.5
614	Arm. - - - - -	53 52 53.5	646	Arm. - - - - -	57 49 38.6
	Ay. 40-5 - - - - -	55.0		Ay. 40 - - - - -	38.1
	R. C. - - - - -	54.7		R. C. - - - - -	38.4
	Pulc. - - - - -	55.0		Pulc. - - - - -	38.6
	Ad. - - - - -	54.6		Ad. - - - - -	38.4

DETAILS OF POSITIONS—DIVISION V.

NEW STARS CLASSED HIGHER THAN "C" NOT BEFORE GIVEN.

(SEE INTRODUCTION.)

Number.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
Gr. 1888	R. C. - - - - -	12	19	16.00	64	29	44.2	
	Arm. - - - - -						44.3	
	Yar. - - - - -			15.73 ₁			43.5 ₃	
	Ay. 73 - - - - -			15.83 ₂			43.3	
	Ad. - - - - -			15.88			43.9	
XII, 198	T. - - - - -	12	45	.	19	50	28.2	
	Arm. - - - - -			1.82			27.9	
	Kön. - - - - -			.			27.1 ₁	
	Q. 64 - - - - -			.			28.9 ₂	
	Main - - - - -			1.44 ₂			27.8	
	Ad. - - - - -			1.66			28.0	
XII, 202	P. M. - - - - -	12	45	44.15	19	51	6.9	
	T. - - - - -			.			8.9 ₁	
	Q. - - - - -			.			8.0 ₂	
	Main - - - - -			43.91 ₂			7.3 ₃	
	Arm. - - - - -			43.94			.	
	Ad. - - - - -			44.01			7.7	
12 Cannm	Pule. - - - - -	12	50	10.656 ₂₁	38	59	38.0	
	Ay. 60 - - - - -			10.683			38.3	
	Ay. 64 - - - - -			10.722			38.2	
	Gylden - - - - -			.			38.3	
	Arg. - - - - -			10.674			38.2	
	Eng. - - - - -			10.691			38.3	
	Paris - - - - -			10.625			38.4	
	Wn. 70 - - - - -			10.708			37.6	
	Leiden - - - - -			.			38.1	
	Ay. 70 - - - - -			10.724			37.9	
	Ad. - - - - -			10.69			38.1	
XII, 253	T. - - - - -	12	57	.	24	29	54.1	
	Arm. - - - - -			.			55.8	
	Ay. 72 - - - - -			6.17			54.7	
	Ad. - - - - -			6.17			54.6	
XIII, 131	T. - - - - -	13	29	17	23	8	9.6	The star has a considerable P. M. in A. R., which I have not determined.
	Pule. - - - - -			.			8.3	
	Arm. - - - - -			.			9.8	
	Q. - - - - -			.			9.0	
	Ad. - - - - -		29	17			9.3	
η Uræ	Pule. - - - - -	13	42	36.801	49	56	16.4	
	Ay. 60 - - - - -			36.869			15.9	
	Ay. 64 - - - - -			36.804			15.7	
	Gylden - - - - -			.			16.3	
	Arg. - - - - -			36.748			16.2	
	Eng. - - - - -			36.827			16.0	
	Paris - - - - -			.			16.4	
	Wn. 70 - - - - -			36.854			15.9	
	Leiden - - - - -			.			16.1	
	Ay. 70 - - - - -			36.770			16.0	
	Ad. - - - - -			36.81			16.1	
XIII, 225	T. - - - - -	13	46	.	12	47	2.9	
	Pule. - - - - -			.			1.9	
	H. - - - - -			10.88			2.3	
	Arm. - - - - -			.			1.8	
	Kön. 63 - - - - -			.			2.2 ₂	
	Q. 63 - - - - -			.			1.1 ₁	
	Ad. - - - - -			10.88			2.1	
XIII, 303	T. - - - - -	14	0	.	17	34	1.6	Catalogue has 1".2.
	Pule. - - - - -			.			1.4	
	Arm. - - - - -			32.08			1.0	
	Q. 66 - - - - -			.			1.2	
	Ad. - - - - -			32.08			1.3	
Gr. 2105	P. M. - - - - -	14	17	27.77	68	21	17.5	
	R. C. - - - - -			27.73			16.1	
	Arm. - - - - -			.			18.2	
	Q. - - - - -			.			15.9 ₂	
	Ay. 73-74 - - - - -			27.52			16.5	
	Ad. - - - - -			27.69			17.1	

Number.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
θ Bootis	Pulc. - - - - -	14	20	56.490	52	25	45.2	
	Ay. 64 - - - - -			56.490			45.5	
	Arg. - - - - -			56.448			46.2	
	Erg. - - - - -			56.548			45.0	
	Wn. 70 - - - - -			56.528			44.8	
	Leiden - - - - -			.			44.8	
	Ay. 70 - - - - -			56.431			44.4	
	Ad. - - - - -			56.49			45.1	
XIV, 126	St. - - - - -	14	28	19.158	60	46	34.3	I have considered it best to adopt the decl. of Pulc., without any P. M.
	T. - - - - -			.			36.1	
	H. 44 - - - - -			.			35.4	
	Rü. - - - - -			.			34.6	
	Arm. - - - - -			.		[33.8]		
	R. C. - - - - -			.			37.4	
	Pulc. - - - - -			19.14			36.8	
	Ad. - - - - -			19.16			36.8	
XIV, 140	T. - - - - -	14	32	.	18	50	35.2	
	Arm. - - - - -			25.40			34.7	
	Pulc. - - - - -			.			33.6	
	Rü. - - - - -			25.30			34.4	
	Q. - - - - -			.			33.7	
	Ay. 64 - - - - -			25.30			34.4	
	Ad. - - - - -			25.33			34.3	
XIV, 247	T. - - - - -	14	55	.	22	32	30.4	
	Rü. - - - - -			.			30.5 ₁	
	Arm. - - - - -			.			30.2 ₁	
	Kön. - - - - -			.			31.3 ₂	
	Q. - - - - -			.			30.2 ₁	
	Main 67 - - - - -			16.16 ₄			30.2	
	Main 69 - - - - -			16.24 ₁			.	
	Ad. - - - - -			16.18			30.5	
β Bootis	Pulc. - - - - -	14	57	14.273	40	53	4.5	
	Ay. 60 - - - - -			14.258			4.6	
	Ay. 64 - - - - -			14.266			4.1	
	Paris - - - - -			14.205			5.0	
	Wn. 70 - - - - -			14.193			.	
	Leiden - - - - -			.			4.8	
	Ay. 70 - - - - -			14.231			5.3	
	Ad. - - - - -			14.24			4.7	
XIV, 281	T. - - - - -	15	1	.	18	55	35.6	
	Pulc. - - - - -			.			36.7	
	Arm. - - - - -			36.52			36.0	
	Kön. - - - - -			.			35.4 ₂	
	Q. 66 - - - - -			.			33.6 ₁	
	Ad. - - - - -			36.52			35.6	
125 Iicis Bootis	Pulc. - - - - -	15	6	.	19	26	51.4	
	H. - - - - -			23.05			50.9	
	Ay. 64 - - - - -			23.01			51.7	
	Ad. - - - - -			23.03			51.3	
μ Bootis	Pulc. - - - - -	15	19	46.091	37	48	59.5	
	Ay. 64 - - - - -			46.087			59.7	
	Wn. 70 - - - - -			46.174			59.8	
	Ay. 72 - - - - -			46.098			60.1	
	Ad. - - - - -			46.11			59.8	
Gr. 2234	Arg. - - - - -	15	21	50.965	60	58	59.7	
	Q. 66 - - - - -			.			60.2 ₁	
	Ad. - - - - -			50.96			59.8	
XV, 83	T. - - - - -	15	22	.	25	32	15.7	
	Rü. - - - - -			.			17.0 ₂	
	Q. - - - - -			.			16.4 ₂	
	Main - - - - -			16.35			16.8	
	Ad. - - - - -			16.35			16.4	

Number.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
Gr. 2278	Gr. - - - - -	15 43 . .	59 42 5.2	
	R. C. - - - - -	19.31	6.4	
	Oom. - - - - -	. .	5.4	
	Ad. - - - - -	19.31	5.6	
τ Herculis	Pule. - - - - -	16 15 59.009	46 36 43.2	
	Ay. 60 - - - - -	59.015	43.2	
	Ay. 64 - - - - -	58.873	43.3	
	Wn. 70 - - - - -	59.123	42.9	
	Ay. 70 - - - - -	59.053	42.3	
	Ad. - - - - -	59.02	43.1	
η Herculis	Pule. - - - - -	16 38 36.713	39 9 40.0	
	Ay. 64 - - - - -	36.685 ₁₃	39.9	
	Wn. 70 - - - - -	36.709 ₁₈	40.0	
	Ay. 72 - - - - -	36.662 ₂₅	40.2	
	Ad. - - - - -	36.69	40.0	
δ Herculis	Müdl. - - - - -	16 51 59.646	33 45 2.9	
	Gould - - - - -	59.423	2.9	
	Ay. 60 - - - - -	59.606	2.7	
	Ay. 64 - - - - -	59.552	1.5	
	Yarn. - - - - -	59.443 ₃	0.9	
	Wn. 70 - - - - -	59.505 ₁₅	2.2	
	Wn. 72 - - - - -	59.46 ₂	1.6	
	Ad. - - - - -	59.54	1.9	
93 Heis Herculis	Rü. - - - - -	17 1 . .	22 15 18.9 ₁	
	Pule. - - - - -	. .	18.8	
	H. - - - - -	1.01	18.5	
	Kön. 61 - - - - -	. .	18.2 ₁	
	Main 69 - - - - -	0.84	19.2	
	Ad. - - - - -	0.84	18.6	
F. 2895	Arg. - - - - -	17 25 23.40	67 24 41.3	
	Ad. - - - - -	23.40	41.3	
β Draconis	Pule. - - - - -	17 27 36.493	52 23 41.4	
	Ay. 60 - - - - -	36.579	40.4	
	Ay. 64 - - - - -	36.498	40.5	
	Arg. - - - - -	36.543	41.3	
	Eng. - - - - -	36.643	40.3	
	Paris - - - - -	36.445	41.7	
	Leiden - - - - -	. .	40.7	
	Ay. 70 - - - - -	36.494	40.9	
	Ad. - - - - -	36.53	40.9	
γ Draconis	Pule. - - - - -	17 53 42.306	51 30 15.5	
	Ay. 60 - - - - -	42.243	15.2	
	Ay. 64 - - - - -	42.280	15.2	
	Gylden. - - - - -	. .	15.5	
	Arg. - - - - -	42.268	16.8	
	Eng. - - - - -	42.261	15.5	
	Paris - - - - -	42.176	16.0	
	Wn. 70 - - - - -	42.339	15.1	
	Leiden - - - - -	. .	15.7	
	Ay. 70 - - - - -	42.175	15.5	
α Lyrae	Ad. - - - - -	42.26	15.6	
	Pule. - - - - -	18 32 42.395	38 40 6.9	
	Ay. 60 - - - - -	42.386	6.3	
	Ay. 64 - - - - -	42.362	6.4	
	Gylden. - - - - -	. .	6.8	
	Paris - - - - -	42.300	7.3	
	Wn. 70 - - - - -	42.419	6.3	
	Leiden - - - - -	. .	6.2	
	Ay. 70 - - - - -	42.331	6.5	
XVIII, 173	Ad. - - - - -	42.37	6.6	
	T. - - - - -	18 35 49.00	65 22 36.5	
	H. - - - - -	49.49	35.8	
	R. C. - - - - -	49.64	36.1	
	Pule. - - - - -	49.56	36.7	
	Ad. - - - - -	49.56	36.4	

Number.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
β Lyrae	Pule. - - - - -	18	45	27.827	33	13	7.8	
	Ay. 60 - - - - -			27.879			8.2	
	Ay. 64 - - - - -			27.864			8.1	
	Paris - - - - -			27.822			8.4	
	Arg. - - - - -			27.883			7.5	
	Eng. - - - - -			27.856			8.1	
	Wn. 70 - - - - -			27.930			7.6	
	Leiden - - - - -						7.5	
	Ay. 70 - - - - -			27.871			7.5	
	Ad. - - - - -			27.87			7.9	
Gr. 2923	Gr. - - - - -	19	37		59	32	55.0	Gr. corrected by $-30''$, according to Argelander.
	R. C. - - - - -			51.58			55.2	
	Oom. - - - - -						55.3	
	Ad. - - - - -			51.58			55.2	
XIX, 320	P. M. - - - - -	19	47	52.51	20	0	50.2	
	T. - - - - -						49.5	
	Arm. - - - - -			52.49			51.0	
	Main - - - - -			52.74			51.9	
	Q. - - - - -						49.02 ₂	
	Ad. - - - - -			52.58			50.4	
Gr. 3019	R. C. - - - - -	19	56	54.60	63	11	36.2	P. M. $-0''.025$, Gr.
	Arm. - - - - -			54.86			35.2	
	Ay. 72 - - - - -			54.91 ₁			35.5	
	Ad. - - - - -			54.77			35.6	
R. C. 4639	P. M. - - - - -	20	6	57.67	61	42	28.8	P. M. $-0''.06$, which agrees with T.
	Ay. 40 - - - - -						28.3	
	R. C. - - - - -			57.91			28.6	
	Ay. 73 - - - - -			57.67			29.0	
	Ad. - - - - -			57.75			28.7	
40 Heis Vulp.	Pule. - - - - -	20	20		21	0	13.1 ₄	
	H. 44 - - - - -			8.70			13.8 ₂	
	Rü. - - - - -						12.9 ₁	
	Main - - - - -			8.82 ₁			12.4 ₄	
	Ad. - - - - -			8.74			13.0	
α Cygni	Pule. - - - - -	20	37	10.246	44	50	4.6	
	Ay. 60 - - - - -			10.242			4.3	
	Ay. 64 - - - - -			10.241			4.1	
	Gylden - - - - -						4.6	
	Arg. - - - - -			10.321			5.0	
	Eng. - - - - -			10.244			3.8	
	Paris - - - - -			10.241			5.0	
	Wn. 70 - - - - -			10.285			3.9	
	Leiden - - - - -						4.2	
	Ay. 70 - - - - -			10.231			4.5	
	Ad. - - - - -			10.26			4.4	
XX, 283	T. - - - - -	20	37	28.56	35	0	32.1	
	H. - - - - -			28.49			33.2	
	Pule. - - - - -						33.7	
	Yarn. - - - - -			28.39			33.9	
	Wn. 72 - - - - -			28.59			33.4	
	Ad. - - - - -			28.51			33.4	
T Cygni	Yarn. - - - - -	20	42	11.24	33	54	56.5	
	Bonn. - - - - -			11.44			57.7	
	Wn. 72 - - - - -			11.44			56.7	
	Ad. - - - - -			11.37			57.0	
A5. 21126	Eng. - - - - -	20	43	42.46	47	22	18.5	
	Ad. - - - - -			42.46			18.5	
XX, 400	T. - - - - -	20	50	40.15	58	50	1.1	
	A5. - - - - -						2.8 ₃	
	Oom. - - - - -						0.8 ₃	
	Ad. - - - - -			40.15			0.7	

Number.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
ν Cygni	Pule. - - - - -	20	52	30.860	40	41	12.7	
	Ay. 60-64 - - - - -			30.794			12.3	
	Wu. 70 - - - - -			30.875			12.2	
	Ad. - - - - -			30.84			12.4	
61 Cygni	Pule. - - - - -	21	1	17.632	38	8	8.6	
	Ay. 60 - - - - -			17.635			8.9	
	Ay. 64 - - - - -			17.665			8.3	
	Arg. - - - - -			17.658			9.3	
	Eng. - - - - -			17.701			9.0	
	Paris - - - - -			17.601			9.3	
	Wu. 70 - - - - -			17.696			8.6	
	Leiden - - - - -						8.6	
	Ay. 70 - - - - -			17.678			8.7	
	Ad. - - - - -			17.67			8.8	
XXI, 1	P. M. - - - - -	21	3	20.59	29	42	4.4	P. M. — 0".04; c. — o.: (Pi.) — 1".1.
	T. - - - - -						3.4	
	Ril. - - - - -						4.2	
	Arm. - - - - -			20.62			4.0	
	Pule. 42 - - - - -						3.1	
	R. C. 2 - - - - -						5.6	
	Q. 62 - - - - -						4.2	
	Kön. 61 - - - - -						[5.9 ₁]	
	Main 70 - - - - -			20.71			6.4	
	Ay. 71 - - - - -			20.74			4.6	
	Ad. - - - - -			20.73			4.5	
11 Heis Pegasi	Pule. - - - - -	21	25	6.77	11	35	21.1	
	H. - - - - -			6.68			21.6	
	Bonn. - - - - -			6.92			22.3	
	Kön. - - - - -			6.73 ₂			22.9	
	Ad. - - - - -			6.78			22.0	
Arg. 224	Arg. - - - - -	21	53	8.95	29	13	45.7	
	Ad. - - - - -			8.95			45.7	
Arg. 228	Arg. - - - - -	22	11	0.35	12	16	18.1	
	Ad. - - - - -			0.35			18.1	
XXII, 65	P. M. - - - - -	22	13	27.20	37	8	31.6	
	T. - - - - -						31.2	
	Kön. - - - - -						31.5	
	Yarn. - - - - -			27.42			32.5	
	Main - - - - -			27.35 ₁			32.1	
	Ad. - - - - -			27.32			31.8	
Arg. 233	Arg. - - - - -	22	36	37.47	65	51	24.9	
	Ad. - - - - -			37.47			24.9	
Arg. 234 = Pi. XXII, 214	Arg. - - - - -	22	39	44.78	29	47	52.4	
	Ad. - - - - -			44.78			52.4	
Gr. 4149	R. C. - - - - -	23	44	18.89	63	2	55.6	
	Bonn. - - - - -			18.86			55.5	
	Yarn. - - - - -			18.75			54.4 ₂	
	Ad. - - - - -			18.83			55.3	
O., 103	P. M. - - - - -	0	26	13.65	27	35	22.0	P. M. from Piazzi — 0".02.
	T. - - - - -						21.9	
	Arm. - - - - -			13.67			21.8	
	Q. 66 - - - - -						23.1	
	Ay. 72 - - - - -						22.2	
	Ad. - - - - -			13.66			22.1	

Number.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
<i>α</i> Cassiopeæ	Pulc. - - - - -	0 33 25.435	55 51 5.2	
	Ay. 60 - - - - -	25.461	5.3	
	Ay. 64 - - - - -	25.383	5.3	
	Gylden - - - - -		5.5	
	Arg. - - - - -	25.480	5.4	
	Eng. - - - - -	25.562	4.3	
	Paris - - - - -	25.461	5.7	
	Wn. 70 - - - - -	25.484	5.2	
	Leiden - - - - -		5.0	
	Ay. 70 - - - - -	25.405	5.4	
	Ad. - - - - -	25.46	5.2	
O., 253	T. - - - - -	0 53 . .	20 34 31.0	P. M. from Piazzi + 0 ^h .03.
	Q. - - - - -		30.9 ₁	
	Main - - - - -	48.03	30.6	
	Ad. - - - - -	48.03	30.8	
O., 258	T. - - - - -	0 54 . .	24 37 8.8	
	Q. - - - - -		7.7 ₂	
	Arm. - - - - -	58.39		
	Main - - - - -	58.52	9.4	
	Ad. - - - - -	58.46	8.7	
Arg. 13	Arg. - - - - -	1 2 25.88	67 6 43.5	
	Ad. - - - - -	25.88	43.5	
I., 7	T. - - - - -	1 4 . .	22 3 27.5	
	Main 68 - - - - -		26.8	
	Main 72 - - - - -	55.99	26.6	
	Ad. - - - - -	55.99	27.0	
Arg. 15	Arg. - - - - -	1 25 34.15	68 18 3.9	
	Ad. - - - - -	34.15	3.9	
Arg. 20	Arg. - - - - -	1 32 20.42	66 17 2.8	
	Ad. - - - - -	20.42	2.8	

DETAILS OF POSITIONS—DIVISION VI.

NEW STARS IN CLASS “C”

NOT IN

THE BRITISH ASSOCIATION CATALOGUE.

Number.	Authority.	Right ascen- sion.	Declination.	Remarks.
		<i>h.</i> <i>m.</i> <i>s.</i>	<i>°</i> <i>'</i> <i>"</i>	
10 Heis Comae	Pule. - - - - -	12 11 13	29 37 48.6	Later observations indicate an in- crease of declination by about 2'', with P. M. of about + 0''.06.
	Il. - - - - -		49.7	
	Ad. - - - - -		49.2	
Rü. 3894	Rü. - - - - -	12 11 23	15 50 28.3	
	Bonn. - - - - -		27.2	
	Ad. - - - - -		27.7	
Rü. 3921	Rü. - - - - -	12 14 29	16 14 5.9 ₂	
	Bonn. - - - - -		6.9 ₂	
	Kön. - - - - -		6.0 ₁	
	Ad. - - - - -		6.3	
Pi. XII, 57	T. - - - - -	12 15 54	25 28 3.1	
	Arm. - - - - -		[27 59.8]	
	H. - - - - -		28 4.7	
	Pule. - - - - -		3.9	
	Kön. - - - - -		5.5 ₁	
	Q. - - - - -		3.5 ₂	
	Ad. - - - - -		4.2	
Pi. XII, 148	T. - - - - -	12 32 50	23 20 52.4	
	Pule. - - - - -		51.7	
	Arm. - - - - -		50.0	
	Kön. - - - - -		49.8 ₁	
	Ad. - - - - -		51.0	
19 Heis Canum	H. - - - - -	12 33 12	36 38 22.7	
	Yarn. - - - - -		21.7 ₂	
	Pule. - - - - -		22.6	
	Ad. - - - - -		22.4	
XII, 166	T. - - - - -	12 36 57	10 47 17.1	P. M. — 0''.04 (L. Pi.).
	Rü. - - - - -		15.4 ₁	
	Arm. - - - - -		16.4	
	Q. - - - - -		16.3	
	Ad. - - - - -		16.4	
Gr. 1918	Rü. - - - - -	12 37 35	61 50 20.8	
	R. C. - - - - -		21.9	
	Ay. - - - - -		23.1	
	Ad. - - - - -		22.0	
R. C. 2904	Rü. - - - - -	12 38 4	59 33 20.2	
	R. C. - - - - -		20.7	
	Oom. - - - - -		19.7	
	Ad. - - - - -		20.1	
XII, 188	T. - - - - -	12 42 33	12 47 1.8	P. M. — 0''.13 (L. Pi.).
	Rü. - - - - -		0.0 ₁	
	Arm. - - - - -		46 59.5 ₂	
	Q. 64 - - - - -		47 0.3	
	Ad. - - - - -		0.5	
Gr. 1943	R. C. - - - - -	12 51 58	69 17 37.7	
	Ay. 45 - - - - -		38.3	
	Ad. - - - - -		38.0	
Gr. 1946	R. C. - - - - -	12 53 32	69 22 54.8	
	Kön. - - - - -		55.5	
	Q. - - - - -		53.8	
	Ad. - - - - -		54.9	
39 Heis Canum	Yarn. - - - - -	12 54 27	32 27 15.0 ₂	
	Kön. - - - - -		16.0 ₁	
	Ad. - - - - -		15.3	
Pi. XII, 268	T. - - - - -	13 0 13	29 41 58.1	
	Arm. - - - - -		58.4	
	Q. - - - - -		56.5 ₂	
	Ad. - - - - -		57.8	

Number.	Authority.	Right ascen- sion.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
XIII, 12	T. - - - - -	13	5	0	62	53	42.3	P. M. — 0''.05; c. — o.; L. — 1''.7; Pi. + 0''.6; Gr. — 0''.6. F. is 15'' too far south.
	R. C. - - - - -						41.6	
	Arm. - - - - -						43.6	
	Q. - - - - -						41.2 ₁	
	Ad. - - - - -						42.4	
XIII, 18	T. - - - - -	13	6	30	19	24	57.1 ₂	
	H. - - - - -						57.9	
	Arm. - - - - -						57.5	
	Q. - - - - -						56.8 ₂	
	Ad. - - - - -						57.4	
XIII, 36	T. - - - - -	13	10	29	20	26	39.9	
	H. - - - - -						41.2	
	Pule. - - - - -						41.7 ₂	
	Arm. - - - - -						39.9	
	Ad. - - - - -						40.7	
XIII, 77	T. - - - - -	13	19	9	24	30	24.1	
	Arm. - - - - -						24.0	
	Pule. - - - - -						23.7	
	Q. - - - - -						[21.0 ₁]	
	Ad. - - - - -						23.8	
XIII, 113	P. M. - - - - -	13	24	15	60	34	27.1	
	T. - - - - -						[32.0]	
	Arm. - - - - -						27.3	
	R. C. - - - - -						25.6	
	Ad. - - - - -						26.7	
XIII, 120	T. - - - - -	13	26	30	15	2	13.1	
	Arm. - - - - -						13.3	
	Schj. - - - - -						13.7	
	Q. 66 - - - - -						12.6	
	Ad. - - - - -						13.2	
XIII, 131	T. - - - - -	13	28	53	13	9	18.2	
	Arm. - - - - -						16.8	
	Ad. - - - - -						17.5	
XIII, 155	T. - - - - -	13	33	1	18	54	6.4	
	Kön. - - - - -						5.0 ₁	
	Arm. - - - - -						8.3	
	Kön. - - - - -						7.7 ₂	
	Ad. - - - - -						7.0	
XIII, 163	T. - - - - -	13	34	53	28	41	54.2	
	H. 44 - - - - -						53.9	
	Pule. - - - - -						54.4 ₂	
	Arm. - - - - -						53.6	
	Ad. - - - - -						54.0	
XIII, 167	T. - - - - -	13	36	28	15	46	46.7	
	Arm. - - - - -						45.5	
	Kön. - - - - -						46.3 ₁	
	Q. - - - - -						43.9 ₁	
	Ad. - - - - -						45.8	
XIII, 211	T. - - - - -	13	43	31	13	37	[60.7]	
	Arm. - - - - -						54.1	
	Kön. 61 - - - - -						53.9 ₁	
	Kön. 64 - - - - -						55.7 ₁	
	Ad. - - - - -						54.4	
XIII, 214	T. - - - - -	13	43	47	13	48	47.0 ₂	
	Arm. - - - - -						47.4	
	Ad. - - - - -						47.2	
XIII, 220	T. - - - - -	13	44	30	21	53	48.7	
	Arm. - - - - -						48.6	
	Ad. - - - - -						48.6	

DETAILS OF POSITIONS—DIVISION VI.

193

Number.	Authority.	Right ascen- sion.	Declination.	Remarks.
Gr. 2055	R. C. - - - - -	<i>h. m. s.</i>	<i>° ' "</i>	
	Arm. - - - - -	13 45 41	62 6 47.9	
	II. - - - - -		49.3	
	Ay. 72 - - - - -		48.7	
	Ad. - - - - -		48.0 ₃ 48.4	
XIII, 247	T. - - - - -	13 49 49	14 40 10.0	
	Rü. - - - - -		11.5	
	Arm. - - - - -		10.5	
	Ad. - - - - -		10.7	
XIII, 255	T. - - - - -	13 51 13	21 33 56.6	Pi. gives 58".6.
	Q. - - - - -		60.2 ₂	
	Ad. - - - - -		58.4	
XIII, 273	T. - - - - -	13 52 59	65 58 16.4	P. M.—0".28; c.—o.: F. 1".6; Pi. +0".2. The epoch of Piazzini is 1797.7.
	Arm. - - - - -		17.1	
	Q. - - - - -		16.5 ₁	
	Ad. - - - - -		16.7	
XIII, 279	T. - - - - -	13 55 16	14 20 11.3	
	Rü. - - - - -		12.6	
	Q. - - - - -		12.9	
	Ad. - - - - -		12.2	
XIII, 280	T. - - - - -	13 55 40	17 21 42.2	
	Arm. - - - - -		41.6	
	Q. 66 - - - - -		41.6 ₁	
	Ad. - - - - -		41.9	
XIII, 281	T. - - - - -	13 55 40	18 16 37.0	
	Arm. - - - - -		38.6	
	Ad. - - - - -		37.8	
XIII, 285	T. - - - - -	13 55 41	64 59 [35.3]	
	Rü. - - - - -		27.6 ₂	
	A. Oe. - - - - -		26.0 ₂	
	Arm. - - - - -		27.8	
	Ad. - - - - -		27.3	
XIII, 309	T. - - - - -	14 1 20	29 2 4.7	
	Arm. - - - - -		4.6	
	Q. 67 - - - - -		4.7	
	Ad. - - - - -		4.6	
XIV, 1	T. - - - - -	14 3 37	16 12 58.7	P. M.—0".05 (Pi.).
	Kön. - - - - -		58.6 ₂	
	Q. - - - - -		58.3 ₂	
	Ad. - - - - -		58.5	
XIV, 20	T. - - - - -	14 7 45	12 35 4.8	
	Arm. - - - - -		6.8 ₁	
	Q. 63 - - - - -		4.3	
	Ad. - - - - -		5.0	
XIV, 26	T. - - - - -	14 8 53	22 27 27.1	c.—o.: Pi.—9".3.
	Arm. - - - - -		27.0	
	Kön. - - - - -		29.2 ₂	
	Q. - - - - -		28.6 ₂	
	Ad. - - - - -		27.8	
Gr. 2107	R. C. - - - - -	14 19 1	61 32 12.4	P. M.—0".10; c.—o.: F. + 3".5; Gr.—0".9. Declination doubtful.
	Rü. - - - - -		13.5	
	Q. - - - - -		14.8 ₁	
	Ad. - - - - -		13.4	
XIV, 97	T. - - - - -	14 23 10	26 24 48.9	
	Rü. - - - - -		50.1	
	Arm. - - - - -		51.1	
	Kön. - - - - -		53.0 ₁	
	Q. - - - - -		49.2 ₂	
	Ad. - - - - -		50.2	

Number.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
Gr. 2129	R. C. - - - - - Main - - - - - Ad. - - - - -	14 28 47	68 38 1.0 0.9 1.0	P. M. — 0''.05, Gr. The star should have been classified B.
XIV, 119	T. - - - - - Arm. - - - - - Ad. - - - - -	14 29 2	13 38 46.0 45.5 45.8	
XIV, 160	T. - - - - - Kön. - - - - - Main - - - - - Ad. - - - - -	14 36 12	21 39 [42.9] 39.3 ₁ 38.5 38.8	Pi. 39''.7. Later observations (Main) give 38''.6, and the place is at least of Class B.
XIV, 178	T. - - - - - Rü. - - - - - Pulc. - - - - - H. - - - - - Arm. - - - - - Ad. - - - - -	14 40 13	15 39 29.9 30.6 ₂ 29.8 32.4 31.2 30.8	P. M. + 0''.05, Pi.
Str. 1884	P. M. - - - - - H. - - - - - Pulc. - - - - - Ad. - - - - -	14 42 51	24 53 11.8 11.8 12.3 12.1	
D. M. 16°.2705	Bonn. - - - - - Main 70 - - - - - Ad. - - - - -	14 47 32	16 13 0.1 ₂ 12 59.1 12 59.5	Main's observations are rather discrepant; later ones, however, agree, and the star may be classed B.
XIV, 231	T. - - - - - Rü. - - - - - Arm. - - - - - Q. 66 - - - - - Ad. - - - - -	14 52 22	14 32 21.1 21.8 ₁ 21.8 21.7 ₁ 21.5	
122 Heis Bootis	Pulc. - - - - - Yarn. - - - - - Ad. - - - - -	15 1 41	36 56 15.3 15.1 ₂ 15.2	
XV, 18	T. - - - - - Pulc. - - - - - Rü. - - - - - H. - - - - - Arm. - - - - - Kön. - - - - - Ad. - - - - -	15 8 0	23 26 [60.5] 55.9 55.1 55.6 56.2 55.9 ₃ 55.6	P. M. + 0''.11 from Pi.
F. 2626	F. - - - - - Oom. - - - - - Ad. - - - - -	15 15 22	59 14 55.8 52.8 52.8	
XV, 53	T. - - - - - Arm. - - - - - Pulc. - - - - - Q. 62 - - - - - Ad. - - - - -	15 15 43	25 24 38.3 37.7 37.1 36.5 ₁ 37.5	
F. 2628	F. - - - - - Oom. - - - - - Ad. - - - - -	15 15 49	58 57 30.1 22.9 ₃ 22.9	
XV, 72	T. - - - - - Arm. - - - - - Pulc. 43 - - - - - Kön. 63 - - - - - Ad. - - - - -	15 20 16	19 55 16.8 17.0 17.7 18.0 17.4	P. M. + 0''.03 (Pi.).
R. C. 3387	R. C. - - - - - Yarn. - - - - - Ad. - - - - -	15 22 8	44 26 35.9 35.9 35.9	P. M. — 0''.07, L. B.

Number.	Authority.	Right ascen- sion.	Declination.	Remarks.
XV, 89	T. - - - - -	<i>h. m. s.</i> 15 23 27	<i>° ' "</i> 16 49 34.5	P. M. + 0".08, Pi.
	Arm. - - - - -		33.6	
	Pule. - - - - -		34.6	
	Rü. - - - - -		35.7 ₁	
	Kön. - - - - -		37.3 ₁	
	Q. - - - - -		33.0 ₁	
	Ad. - - - - -		34.5	
Gr. 2240	R. C. - - - - -	15 25 43	55 37 24.5	
	Yarn. - - - - -		25.9 ₂	
	Ad. - - - - -		25.1	
XV, 119	T. - - - - -	15 27 9	62 31 40.1	
	A. Ö. - - - - -		39.8 ₃	
	R. C. - - - - -		40.7	
	Arm. - - - - -		39.9	
	Ad. - - - - -		40.1	
XV, 142	T. - - - - -	15 32 55	24 55 55.3	P. M. — 0".05; c. — o.: L. — 2'.8 ₂ ; Pi. + 1".1.
	Pule. - - - - -		57.6	
	H. - - - - -		56.0	
	Arm. - - - - -		57.2	
	Ad. - - - - -		56.6	
R. C. 3431	R. C. - - - - -	15 35 14	43 6 8.1 ₂	
	Yarn. - - - - -		5.3 ₃	
	Ad. - - - - -		6.5	
XV, 168	T. - - - - -	15 37 14	66 11 49.7	P. M. — 0".11; c. — o.: Pi. — 1".1.
	Arm. - - - - -		49.8	
	Yarn. - - - - -		51.5 ₂	
	Q. - - - - -		51.6 ₂	
	Ad. - - - - -		50.7	
D. M. 58°.1591	Bonn. - - - - -	15 42 6	58 49 23.0 ₁	
	Oom. - - - - -		20.8	
	Ad. - - - - -		21.5	
XV, 176	T. - - - - -	15 42 24	14 10 43.7	P. M. — 0".10, Pi.; c. — o.: L. — 0".4; Pi. + 0".3.
	Arm. - - - - -		43.6	
	Q. 65 - - - - -		43.2 ₂	
	Ad. - - - - -		43.5	
XV, 179	T. - - - - -	15 42 58	13 6 30.0	
	Arm. - - - - -		30.8	
	Q. 65 - - - - -		29.0 ₁	
	Ad. - - - - -		30.1	
XV, 183	T. - - - - -	15 43 42	12 56 26.8	P. M. + 0".03; c. — o.: L. + 1".4; Pi. + 0".3.
	Arm. - - - - -		26.9	
	Schj. - - - - -		26.0 ₂	
	Q. - - - - -		25.6 ₁	
	Ad. - - - - -		26.2	
R. C. 3462	R. C. - - - - -	15 46 43	42 56 27.9	
	Yarn. - - - - -		27.1	
	Ad. - - - - -		27.5	
XV, 206	T. - - - - -	15 47 52	16 26 53.9	
	Arm. - - - - -		53.9 ₂	
	Q. - - - - -		52.9 ₁	
	Main - - - - -		53.9 ₂	
	Ad. - - - - -		53.7	
XV, 215	T. - - - - -	15 50 4	18 59 15.4	
	Pule. - - - - -		16.6	
	Arm. - - - - -		17.2	
	Ad. - - - - -		16.2	
D. M. 59°.1698	Bonn. - - - - -	16 1 22	59 25 53.0	
	Oom. - - - - -		52.4	
	Ad. - - - - -		52.6	

Number.	Authority.	Right ascension.	Declination.	Remarks.
Gr. 2309	R. C. - - - - - Q. - - - - - Ad. - - - - -	<i>h. m. s.</i> 16 2 40	<i>° ' "</i> 60 22 59.3 58.3 ₂ 58.9	
Gr. 2326	A. Ö. - - - - - H. 44 - - - - - R. C. - - - - - Ad. - - - - -	16 11 58	67 27 43.4 ₁ 42.0 41.2 42.1	
XVI, 146	T. - - - - - A. Ö. - - - - - Arm. - - - - - Q. - - - - - Ad. - - - - -	16 31 22	63 6 [57.2] 49.7 ₂ 50.8 51.2 ₁ 50.6	Piazzi gives 51".3.
XVI, 161	T. - - - - - R. C. - - - - - On. - - - - - Yarn. - - - - - Ad. - - - - -	16 35 8	49 6 34.7 35.8 34.8 33.4 34.6	P. M. - 0".08; c. -- o.: Pi. + 1".2.
A. Ö. 16481	T. - - - - - Rü. - - - - - Yarn. - - - - - Ad. - - - - -	16 39 43	62 32 [50.4 ₂] 41.5 ₁ 42.5 42.1	Doubtful.
Rü. 5552	Rü. - - - - - Yarn. - - - - - Ad. - - - - -	16 42 23	13 48 51.9 ₂₀ 49.6 ₂ 51.1	
D. M. 13°.3228	Bonn. - - - - - Schj. - - - - - Ad. - - - - -	16 43 13	13 6 9.1 8.9 9.0	
XVI, 240	T. - - - - - Rü. - - - - - Arm. - - - - - Ad. - - - - -	16 49 30	13 49 25.2 24.8 26.2 25.4	Declination rather uncertain.
75 Heis Her- culis	Pulc. - - - - - H. - - - - - Ad. - - - - -	16 49 32	21 9 40.5 41.2 40.9	
84 Heis Her- culis	Pulc. - - - - - H. - - - - - Ad. - - - - -	16 55 42	22 49 5.6 6.6 5.8	
XVI, 292	T. - - - - - Rü. - - - - - H. - - - - - Pulc. - - - - - Q. - - - - - Kön. - - - - - Ad. - - - - -	16 59 15	19 46 26.1 25.0 24.6 24.5 24.2 ₁ 24.0 ₁ 24.9	
XVI, 298	T. - - - - - Q. 64 - - - - - Ad. - - - - -	17 0 18	10 37 28.0 ₃ 26.4 ₁ 27.4	
A. Ö. 16829	Åbo. Dorpat - - - - - Pulc. - - - - - Ad. - - - - -	17 3 20	56 18 0.8 0.8 0.8	Data from Struve's Arc du Méridien.
XVII, 7	T. - - - - - Kön. 62 - - - - - Q. - - - - - Ad. - - - - -	17 4 54	26 36 46.6 49.5 48.0 ₂ 47.7	
XVII, 30	T. - - - - - A. Ö. - - - - - R. C. - - - - - Arm. - - - - - Bonn. - - - - - Ad. - - - - -	17 6 40	61 18 55.5 ₂ 56.8 ₁ 57.0 56.6 57.0 ₂ 56.6	P. M. + 0".05, Arg. LIX.

Number.	Authority.	Right ascen- sion.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
XVII, 37	T. - - - - - Q. - - - - - Ad. - - - - -	17 10 29	23 53 0.4 52 59.7 ₂ 53 0.1	
XVII, 64	T. - - - - - H. - - - - - Pule. - - - - - Arm. - - - - - Kön. - - - - - Q. - - - - - Ad. - - - - -	17 13 54	28 57 16.4 17.8 17.3 [20.4] 16.5 17.7 ₃ 17.0	P. M. — 0".03 (Pi.).
Gr. 2432	Pos. Med. - - - - - R. C. - - - - - Arm. - - - - - Ay. 73 - - - - - Ad. - - - - -	17 14 34	60 50 50.7 ₁ 51.5 51.2 50.9 51.2	P. M. + 0".04 Gr. Including later observations we find the declination 50".7 and P. M. + 0".027 : Class B.
Gr. 2433	R. C. - - - - - Arm. - - - - - Ay. 73 - - - - - Ad. - - - - -	17 14 59	60 48 12.5 11.6 12.4 11.8	P. M. — 0".03 (Gr.).
XVII, 71	T. - - - - - Pule. - - - - - Rii. - - - - - H. - - - - - Ad. - - - - -	17 15 4	25 39 58.0 58.7 [55.8 ₁] 58.6 58.3	
XVII, 78	T. - - - - - Q. - - - - - Ad. - - - - -	17 16 33	10 19 2.8 3.7 3.2	
XVII, 94	P. M. - - - - - T. - - - - - Pule. - - - - - H. - - - - - Kön. - - - - - Ad. - - - - -	17 18 55	15 43 16.7 15.9 16.0 16.1 15.2 ₁ 16.0	Pi., 15".6.
XVII, 95	T. - - - - - H. - - - - - Arm. - - - - - Kön. - - - - - Q. 65 - - - - - Ad. - - - - -	17 18 55	16 25 5.5 3.8 6.7 ₁ 3.7 ₁ 3.1 ₁ 4.6	
XVII, 104	T. - - - - - Q. - - - - - Ad. - - - - -	17 20 6	16 29 41.8 42.1 ₃ 41.9	
61 Heis Ophi- uchi	H. - - - - - Pule. - - - - - Ad. - - - - -	17 28 4	16 24 29.1 29.0 29.1	A P. M. of — 0".06 is quite probable, and a correction of — 1".8 to the declination.
XVII, 163	P. M. - - - - - T. - - - - - H. - - - - - Pule. 41-45 - - - - - Q. 63 - - - - - Kön. 64 - - - - - Ad. - - - - -	17 30 39	21 4 40.0 [34.6] 39.1 41.5 ₂ 39.3 ₃ 38.6 ₁ 39.4	Pi., 38".5.
XVII, 183	T. - - - - - Rii. - - - - - Q. 63 - - - - - Schj. - - - - - Ad. - - - - -	17 33 13	13 23 60.5 58.8 ₁ 60.2 ₁ 59.8 ₂ 59.9	
XVII, 220	T. - - - - - A. Ö. - - - - - Q. - - - - - Ad. - - - - -	17 34 58	68 11 47.1 ₁ 49.5 ₁ 48.1 48.5	

Number.	Authority.	Right ascen- sion.	Declination.	Remarks.
XVII, 237	T. - - - - - R. C. - - - - - Arm. - - - - - Q. - - - - - Ad. - - - - -	<i>h. m. s.</i> 17 37 9	<i>° ' "</i> 63 33 [31.0] 33.6 34.4 34.6 34.0	P. M. — 0''.07 (Pi.).
Aü. 17420 = R. C. 3745	R. C. - - - - - W. - - - - - Ad. - - - - -	17 37 18	68 26 57.6 58.7 ₂ 58.1	
154 Heis Her- culis	Pulc. - - - - - Rü. - - - - - H. - - - - - Ad. - - - - -	17 41 37	17 44 41.5 [44.7] 40.9 41.2	
159 Heis Her- culis	Rü. - - - - - Bonn. - - - - - Main. - - - - - Ad. - - - - -	17 43 3	20 36 32.1 ₁ 32.0 ₁₆ 31.1 31.7	Well-determined for 1860, P. M. Doubtful.
Rü. 6047	Rü. - - - - - H. - - - - - Ad. - - - - -	17 44 13	20 40 40.4 ₂ 39.1 39.6	
166 Heis Her- culis	Pulc. - - - - - H. - - - - - Rü. - - - - - Ad. - - - - -	17 45 32	29 21 24.2 24.3 25.5 24.6	
172 Heis Her- culis	Pulc. - - - - - H. - - - - - Ad. - - - - -	17 50 36	22 29 5.6 5.0 5.3	
XVII, 301	T. - - - - - Kön. - - - - - Q. - - - - - Ad. - - - - -	17 51 7	18 37 52.4 51.4 ₂ 51.0 ₂ 51.6	P. M. + 0''.03 (Pi.).
XVII, 381	T. - - - - - Q. 65 - - - - - Ad. - - - - -	18 2 3	13 3 20.0 ₁ 21.5 ₂ 20.9	
XVIII, 23	Schw. - - - - - T. - - - - - Arm. - - - - - Ay. 71 - - - - - Ad. - - - - -	18 5 18	66 55 44.7 ₁ 43.4 45.5 44.1 ₁ 44.5	Ay. 71 ₁ (since added) gives 44''.6; hence the star is classed B in the catalogue.
XVIII, 31	T. - - - - - Arm. - - - - - Ad. - - - - -	18 8 43	61 51 1.3 ₃ 5.3 ₃ 3.5	Very doubtful. Pi. 2''.5; A. Ö. 4''.7 (1).
Gr. 2529	R. C. - - - - - Kön. - - - - - Ad. - - - - -	18 8 44	41 6 58.2 57.0 57.5	P. M. — 0''.05, L. G.
204 Heis Her- culis	Rü. - - - - - Pulc. - - - - - H. - - - - - Kön. - - - - - Ad. - - - - -	18 12 38	18 5 3.7 6.8 5.3 4.8 5.1	
D. M. 64°.1253	A. Ö. - - - - - Bonn. - - - - - Ad. - - - - -	18 13 42	64 42 34.9 33.9 33.9	
8 Heis Lyræ	L. - - - - - Pulc. - - - - - H. 44 - - - - - Bonn. - - - - - Ad. - - - - -	18 21 10	29 45 34.8 30.7 ₂ 30.7 ₁ 31.9 ₁ 31.0	

Number.	Authority.	Right ascen- sion.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
XVIII, 83	T. - - - - - H. - - - - - Arm. - - - - - Ad. - - - - -	18 21 27	26 23 19.2 18.6 ₂ 19.2 19.1	
XVIII, 84	T. - - - - - Pule. - - - - - H. - - - - - Arm. - - - - - Ad. - - - - -	18 21 39	26 22 35.1 36.9 35.4 37.5 36.4	P. M. + 0".04, Pi.
217 Heis Her- culis	Pule. - - - - - H. - - - - - Ad. - - - - -	18 29 42	18 6 18.5 16.7 17.6	
XVIII, 133	T. - - - - - Arm. - - - - - Q. - - - - - Ad. - - - - -	18 31 22	11 19 4.7 ₁ 6.1 ₁ 5.7 5.5	
A. Ö. 18414	12-yr. - - - - - Ou. - - - - - Ad. - - - - -	18 31 37	51 41 0.9 0.1 0.5	
XVIII, 156	T. - - - - - Arm. - - - - - Ad. - - - - -	18 36 1	12 8 15.8 17.5 ₂ 16.5	
XVIII, 174	T. - - - - - H. 44 - - - - - R. C. - - - - - Arm. - - - - - Ad. - - - - -	18 36 26	62 24 45.3 46.0 45.9 [56.6 ₁] 45.5	Pi., 46".8; Gr., 45".1; hence no P. M.
P. M. 2162	P. M. - - - - - Sabler - - - - - Q. - - - - - Ad. - - - - -	18 42 32	10 37 22.0 23.1 23.3 22.8	Proper motion — 0".48.
XVIII, 212	T. - - - - - A. Ö. - - - - - Arm. - - - - - Ad. - - - - -	18 43 4	61 48 25.0 ₂ 26.6 ₁ 25.5 25.5	
XVIII, 203	T. - - - - - H. - - - - - Pule. - - - - - Arm. - - - - - Q. - - - - - Ad. - - - - -	18 43 26	19 11 21.2 23.6 23.0 22.6 ₂ 25.1 ₁ 23.0	P. M. — 0".05 (L. Pi.).
3 Heis Aquilæ	Pule. - - - - - H. - - - - - Ad. - - - - -	18 46 18	13 49 4.7 4.0 4.4	
[F. 3047	Dorpat and Åbo Pule. - - - - - Ad. - - - - -	18 51 56	59 51 31.7 31.7 31.7	
42 Heis Lyræ	H. - - - - - Pule. - - - - - Ad. - - - - -	18 54 40	26 2 32.6 32.3 32.4	
D. M. 20°.4022	Bonn. - - - - - Ad. - - - - -	18 56 0	20 39 25.5 25.5	
46 Heis Lyræ	H. - - - - - Ril. - - - - - Pule. - - - - - Ad. - - - - -	18 56 13	26 6 56.4 [52.7 ₂] 55.4 55.9	

Number.	Authority.	Right ascen- sion.	Declination.	Remarks.
Yarn. 8113.	Yarn. - - - - - Ad. - - - - -	<i>h. m. s.</i> 18 58 21	<i>° ' "</i> 21 5 7.9 7.9	
Gr. 2761	Åbo and Dorpat - - - - - R. C. - - - - - Pulc. - - - - - Ad. - - - - -	19 0 20	59 56 37.4 37.7 37.7 37.7	The observations, except R. C., are from Struve's Arc du Méridien. Gr. 36".9.
XIX, 6	T. - - - - - Arm. - - - - - Q. - - - - - Ad. - - - - -	19 1 18	62 31 9.6 ₂ 14.1 ₁ 9.5 ₁ 10.9	Pi. 9".7; A. Ö. 11".1.
56 Heis Lyræ, pre.	Pulc. - - - - - H. - - - - - Ad. - - - - -	19 6 32	26 4 20.2 ₁ 19.7 19.9	
56 Heis Lyræ, foll.	Pulc. - - - - - H. - - - - - Ad. - - - - -	19 6 39	26 2 34.3 33.2 33.6	
F. 3115	Åbo and Dorpat - - - - - Pulc. - - - - - Ad. - - - - -	19 7 37	58 15 50.0 49.8 49.8	From Struve's Arc du Méridien.
26 Heis Aquilæ	H. - - - - - Pulc. - - - - - Ad. - - - - -	19 9 38	14 52 4.1 3.4 3.8	
F. 3136	F. - - - - - Oom. - - - - - Ad. - - - - -	19 12 23	59 28 8.6 10.9 10.9	
Gr. 2809	Ay. 36 - - - - - Ay. 45 - - - - - Pulc. - - - - - R. C. - - - - - Yarn. - - - - - Ad. - - - - -	19 13 16	46 45 52.8 53.1 52.8 53.1 52.6 52.9	P. M. + 0".26; c. — o. : L. — 1".0; Gr. + 0".4.
XIX, 99	T. - - - - - Arm. - - - - - Ad. - - - - -	19 13 53	66 53 44.7 40.4 42.6	Should not have been inserted; very doubtful.
65 Heis Lyræ	H. - - - - - Pulc. - - - - - Yarn. - - - - - Ad. - - - - -	19 14 37	37 12 56.6 56.4 56.4 ₂ 56.5	
F. 3148	F. - - - - - Oom. - - - - - Ad. - - - - -	19 15 56	59 36 21.0 22.7 22.7	
Gr. 2835	H. 44 - - - - - R. C. - - - - - Ad. - - - - -	19 18 47	64 9 15.9 15.7 15.8	
44 Heis Aquilæ	H. 44 - - - - - Pulc. 46-50 - - - - - Ad. - - - - -	19 20 35	12 46 23.3 ₂ 22.6 ₂ 22.9	
45 Heis Aquilæ	H. - - - - - Pulc. - - - - - Ad. - - - - -	19 21 49	14 1 53.5 52.7 53.1	
XIX, 139	T. - - - - - Rü. - - - - - Arm. - - - - - Q. - - - - - Ad. - - - - -	19 22 27	19 59 40.4 41.4 ₂ 41.6 41.2 41.1	
48 Heis Aquilæ	Rü. - - - - - H. - - - - - Pulc. - - - - - Schj. - - - - - Ad. - - - - -	19 23 37	14 20 25.4 ₂ 26.0 25.8 25.5 ₂ 25.7	

Number.	Authority.	Right ascension.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
D. M. 12° 3940	Bonn. - - - - - Schj. - - - - - Ad. - - - - -	19 24 43	12 33 34.0 ₂ 32.2 ₁ 33.2	
D. M. 14° 3974	Bonn. - - - - - Ad. - - - - -	19 30 30	14 7 1.4 1.4	
61 Heis Aquilæ	Pule. 41 - - - - - H. - - - - - Ad. - - - - -	19 30 58	10 59 45.0 44.1 44.6	There is a probable P. M. of — 0".10 (L. L. and B.) not used. Star doubtful.
67 Heis Aquilæ	Pule. 41 - - - - - Ril. 42 - - - - - H. 44 - - - - - Ad. - - - - -	19 35 18	13 31 37.4 36.3 37.4 37.1	
XIX, 306	T. - - - - - Arm. - - - - - Q. 64 - - - - - Ad. - - - - -	19 46 13	11 19 15.2 15.7 14.0 ₁ 15.0	P. M. — 0".31 from Piazz.
XIX, 307	P. M. - - - - - T. - - - - - Arm. - - - - - Q. 62 - - - - - Ad. - - - - -	19 46 18	10 1 58.3 57.1 57.6 56.0 ₁ 57.3	
XIX, 312	T. - - - - - Arm. - - - - - Ad. - - - - -	19 47 5	18 25 11.4 12.1 11.8	
XIX, 362	T. - - - - - Ril. - - - - - Arm. - - - - - Q. - - - - - Ad. - - - - -	19 54 30	17 16 11.4 11.5 11.6 9.2 10.9	
XIX, 394	T. - - - - - Arm. - - - - - Ad. - - - - -	19 58 36	17 23 0.3 2.1 1.2	
XX, 1	T. - - - - - R. C. - - - - - Arm. - - - - - Ay. 50 - - - - - Ad. - - - - -	20 0 51	64 18 24.0 24.5 26.5 ₂ 23.6 ₂ 24.6	
XIX, 420	T. - - - - - Arm. - - - - - Kön. - - - - - Q. - - - - - Ad. - - - - -	20 2 25	16 18 8.3 10.2 [14.7] 8.4 8.9	
106 Heis Aquilæ	Pule. 41 - - - - - Ril. - - - - - H. 44 - - - - - Ad. - - - - -	20 2 40	10 21 47.5 47.0 46.1 ₂ 47.0	
XX, 2	T. - - - - - Main - - - - - Ad. - - - - -	20 3 27	16 32 41.9 46.7 ₁ 43.5	Pi. gives 43".3. The declination is uncertain. Three later observations of Main give 16° 32' 40".8.
D. M. 59° 2193	Oom. - - - - - Ad. - - - - -	20 9 35	59 18 44.2 44.2	
Gr. 3105	R. C. - - - - - Yarn. - - - - - Ad. - - - - -	20 11 31	38 30 56.7 57.0 56.8	
114 Heis Aquilæ	Pule. - - - - - Ril. - - - - - H. - - - - - Ad. - - - - -	20 14 41	17 24 5.0 3.2 4.7 4.1	

Number.	Authority.	Right ascen- sion.	Declination.	Remarks.
XX, 171	T. - - - - - Arm. - - - - - Ad. - - - - -	<i>h. m. s.</i> 20 24 28	<i>° ' "</i> 19 15 2.1 3.4 2.7	
Gr. 3208	Rü. - - - - - R. C. - - - - - Main - - - - - Ad. - - - - -	20 25 36	68 54 46.8 ₂ 47.7 ₃ 49.6 ₃ 47.9	A P. M. of $+0''.03$ would give $48''.8$ for 1875.0.
XX, 185	T. - - - - - Q. - - - - - Ad. - - - - -	20 26 8	16 34 16.9 15.4 ₃ 16.3	
D. M. 17° 4355	Rü. - - - - - Bonn. - - - - - Ad. - - - - -	20 28 20	17 45 30.9 ₃ 32.4 31.8	
44 Heis Vulpec.	Main - - - - - Ad. - - - - -	20 28 36	20 33 30.2 30.2	
108 Heis Cygni	H. - - - - - Pulc. - - - - - Yarn. - - - - - Ad. - - - - -	20 32 41	37 53 41.3 41.1 42.4 41.5	
XX, 270	T. - - - - - Arm. - - - - - Ad. - - - - -	20 35 44	13 21 53.2 53.0 53.1	
XX, 319	T. - - - - - Q. - - - - - Ad. - - - - -	20 42 25	25 43 8.0 7.8 7.9	
XX, 358	T. - - - - - Arm. - - - - - Pulc. - - - - - R. C. ₂ - - - - - Ad. - - - - -	20 46 10	27 46 58.2 59.2 58.8 58.0 58.6	
F. 3606	H. 44 - - - - - Bonn. - - - - - Ad. - - - - -	20 47 6	63 34 34.4 34.2 34.3	
30 Heis Delph.	Rü. - - - - - Pulc. - - - - - H. 44 - - - - - Kön. - - - - - Ad. - - - - -	20 54 2	16 20 23.0 21.3 21.6 19.7 ₁ 21.6	
R. C. 5050	R. C. - - - - - Yarn. - - - - - Ad. - - - - -	20 54 16	43 55 50.1 50.6 ₃ 50.3	
31 Heis Delph.	Pulc. - - - - - H. - - - - - Ad. - - - - -	20 54 45	18 50 43.0 41.6 42.3	Star doubtful.
XX, 453	T. - - - - - Q. - - - - - Ad. - - - - -	20 58 10	28 35 52.7 56.9 ₂ 54.5	Doubtful.
Gr. 3410	R. C. - - - - - H. - - - - - Ad. - - - - -	21 6 48	62 47 8.6 10.5 9.6	
XXI, 71	T. - - - - - Arm. - - - - - Kön. - - - - - Ad. - - - - -	21 12 49	10 40 39.6 39.7 40.6 ₁ 39.8	
XXI, 77	T. - - - - - Rü. - - - - - Arm. - - - - - Ad. - - - - -	21 13 22	17 17 59.1 ₂ [18 3.6 ₂] 17 58.5 58.8	

Number.	Authority.	Right ascen- sion.	Declination.	Remarks.
		<i>h. m. s.</i>	<i>° ' "</i>	
XXI, 133	T. - - - - -	21 19 0	63 49 47.9	
	Arm. - - - - -		48.9	
	Ad. - - - - -		48.5	
8 Heis Pegasi	Main - - - - -	21 23 17	21 38 3.8	
	Ad. - - - - -		3.8	
XXI, 195	T. - - - - -	21 28 51	22 12 3.3	P. M. — 0".06; agrees with Piazz.
	Rü. - - - - -		1.9	
	Arm. - - - - -		2.6	
	Q. - - - - -		2.2	
	Ad. - - - - -		2.6	
Gr. 3516	Rü. - - - - -	21 31 51	66 10 11.3	
	R. C. - - - - -		12.7	
	Ad. - - - - -		12.0	
Gr. 3517	Rü. - - - - -	21 32 4	66 12 54.7 ₂	
	R. C. - - - - -		53.7	
	Ad. - - - - -		54.1	
Gr 3549	R. C. - - - - -	21 37 31	40 28 38.5	
	T. - - - - -		38.1 ₂	
	Ad. - - - - -		38.4	
22 Heis Pegasi	Kön. - - - - -	21 38 30	14 12 12.6 ₂	
	Bonn. - - - - -		11.1 ₂	
	Ad. - - - - -		11.8	
R. C. 5390	H. 44 - - - - -	21 41 27	61 53 6.5	
	R. C. - - - - -		6.3	
	Ad. - - - - -		6.4	
194 Heis Cygni	Yarn. - - - - -	21 43 18	38 4 5.8	
	Ad. - - - - -		5.8	
A. Ö. 22896	Oom. - - - - -	21 43 52	59 7 13.4	
	Ad. - - - - -		13.4	
XXI, 312	T. - - - - -	21 45 42	19 14 27.7	c. — o.: Ll. — 1".1 ₂ ; Pl. + 0".6; P. M. + 0".03.
	Arm. - - - - -		28.9	
	Pule. - - - - -		28.0	
	H. - - - - -		28.8	
	Ad. - - - - -		29.3	
Gr. 3594	R. C. - - - - -	21 46 35	64 39 3.8	One of these two must be erroneous. The result is very uncertain.
	Q. 67 - - - - -		38 58.2	
	Ad. - - - - -		38 58.2	
36 Heis Pegasi	Pule. - - - - -	21 47 44	19 4 47.2	A P. M. of + 0".06 would reconcile all the observations except B. Z., and give decl. 1875.0 48".8. I think it altogether probable.
	Rü. - - - - -		46.3 ₂	
	H. 44 - - - - -		46.4	
	Main - - - - -		48.9	
	Ad. - - - - -		47.2	
Gr. 3608	Rü. - - - - -	21 48 30	65 9 57.6	
	R. C. - - - - -		60.0	
	Ad. - - - - -		58.8	
Gr. 3609	R. C. - - - - -	21 49 2	62 7 25.8	
	Arm. - - - - -		25.0	
	Ad. - - - - -		25.4	
Rü. 9704	Rü. - - - - -	21 52 53	11 35 51.1	
	Ay. 50-60 - - - - -		50.3	
	Ay. 64 - - - - -		50.1	
	Ad. - - - - -		50.3	
XXI, 369	T. - - - - -	21 55 29	26 13 45.9 ₂	P. M. — 0".04 (L. Pl.).
	Q. - - - - -		47.4	
	Ad. - - - - -		47.0	

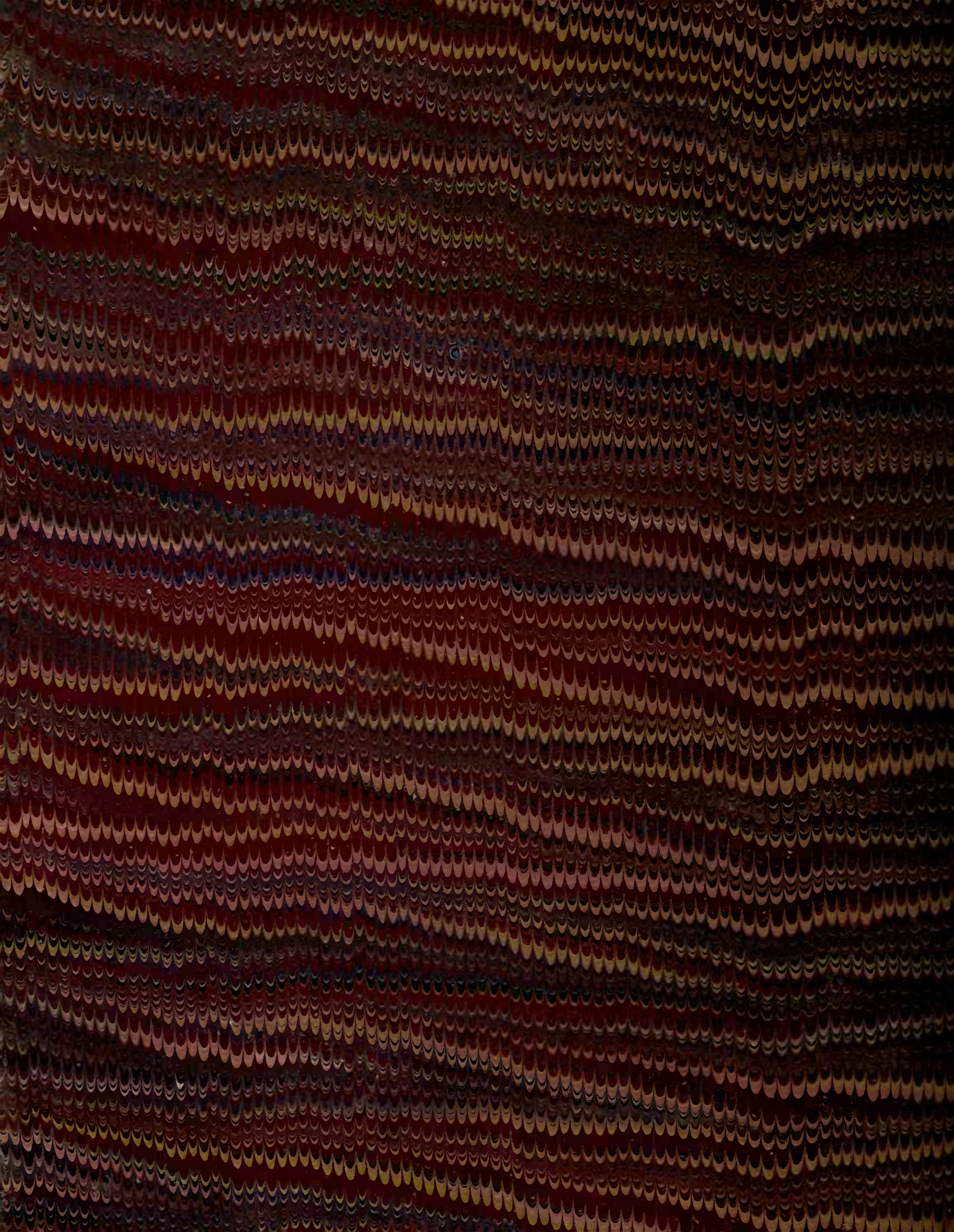
Number.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
Gr. 3690	R. C. - - - - - Yarn. - - - - - Ad. - - - - -	22	2	48	52	41	49.4 49.6 49.5	
XXII, 60	T. - - - - - Rü. - - - - - Q. - - - - - Ad. - - - - -	22	12	48	19	20	19.3 20.9 ₂ 18.8 ₁ 19.7	P. M. — 0".04, L. Pi.
XXII, 69	T. - - - - - Rü. - - - - - Ad. - - - - -	22	14	36	13	24	21.4 19.3 20.3	
XXII, 158	T. - - - - - Rü. - - - - - Pule. - - - - - Ad. - - - - -	22	29	48	19	37	54.7 52.7 53.5 53.6	P. M. — 0".12 from Pi.
Gr. 3845	R. C. - - - - - Q. - - - - - Ad. - - - - -	22	33	14	63	7	11.7 11.4 11.5	
XXII, 186	T. - - - - - Rü. - - - - - Arm. - - - - - H. - - - - - Kön. - - - - - Q. - - - - - Ad. - - - - -	22	34	40	13	53	31.3 ₁ 33.3 32.0 32.5 ₁ 33.3 ₁ 33.4 ₁ 32.6	P. M. + 0".10; c. — o.: L. + 3".8 ₁ ; Pi. — 1".4.
XXII, 232	T. - - - - - Arm. - - - - - Ad. - - - - -	22	44	32	18	28	49.4 49.0 49.2	
R. C. 5853	P. M. - - - - - Ay. 40 - - - - - R. C. - - - - - Ay. 45 - - - - - Ay. 50 - - - - - Ad. - - - - -	22	45	10	65	53	33.7 33.6 31.9 32.9 33.7 33.2	
A. Ö. 24834	Oom. - - - - - Ad. - - - - -	22	48	4	59	26	11.5 11.5	
43 Heis La- eertæ	Pule. - - - - - Yarn. - - - - - Ad. - - - - -	22	49	55	35	41	5.3 4.1 ₂ 4.8	
Gr. 3935	R. C. - - - - - Yarn. - - - - - Ad. - - - - -	22	51	50	38	43	16.4 17.0 ₂ 16.8	P. M. + 0".05.
XXII, 283	T. - - - - - Arm. - - - - - Ad. - - - - -	22	56	24	15	33	36.3 35.8 36.0	
XXII, 285	T. - - - - - H. - - - - - Pule. 48 - - - - - Arm. - - - - - Ad. - - - - -	22	56	38	22	27	[28.4] 33.2 ₁ 32.3 ₂ 32.1 32.4	P. M. — 0".05, L. Pi.
XXII, 297	Pi. - - - - - T. - - - - - Ad. - - - - -	22	59	20	14	17	5.6 6.8 6.8	
118 Heis Pegasi	Pule. - - - - - H. - - - - - Main - - - - - Ad. - - - - -	23	1	19	20	27	37.1 37.6 36.3 ₂ 36.7	P. M. — 0".05; c. — o.: Ll. — 0".7 ₁ ; B. Z. + 1".1 ₂ .

Number.	Authority.	Right ascen- sion.	Declination.	Remarks.
Gr. 3993	R. C. - - - - - 12-yr. - - - - - 6-yr. - - - - - Ad. - - - - -	<i>h. m. s.</i> 23 2 42	<i>° ' "</i> 62 57 25.6 27.7 ₂ 26.7 26.7	
R. C. 5973	R. C. - - - - - Yarn. - - - - - Ad. - - - - -	23 3 4	38 14 18.7 ₂ 20.3 19.6	
D. M. 64 ^o .1764	Bonn. - - - - - Ad. - - - - -	23 4 14	64 32 3.5 3.5	
XXIII. 4	T. - - - - - Rü. - - - - - Arm. - - - - - Pule. - - - - - Ad. - - - - -	23 4 30	16 55 4.6 4.1 4.7 3.2 4.1	
XXIII, 20	T. - - - - - Arm. - - - - - Kön. - - - - - Ad. - - - - -	23 7 47	18 57 15.3 15.0 15.5 ₂ 15.2	
130 Heis Pegasi	Pule. - - - - - Rü. - - - - - H. - - - - - Ad. - - - - -	23 9 48	24 5 22.6 21.3 23.0 ₂ 22.2	
XXIII, 34	T. - - - - - Rü. - - - - - Arm. - - - - - Q. - - - - - Ad. - - - - -	23 11 25	17 37 25.7 25.7 ₂ 26.1 24.6 ₁ 25.6	
XXIII, 57	T. - - - - - Kön. - - - - - Bonn. - - - - - Ad. - - - - -	23 14 42	16 34 4.4 4.0 ₂ 3.4 ₂ 3.9	P. M. + 0".07, L. Pl.
Gr. 4088	R. C. - - - - - Arm. - - - - - Q. 66 - - - - - Ad. - - - - -	23 26 34	65 2 56.7 57.4 ₁ 56.6 ₁ 57.0	
F. 4509	Oom. - - - - - Ad. - - - - -	23 27 47	59 21 39.5 39.5	
151 Heis Pegasi	Pule. 48 - - - - - Main 72 - - - - - Ad. - - - - -	23 28 45	23 44 8.9 ₂ 8.0 ₁ 8.5	
P. M. 2848	P. M. - - - - - Rü. - - - - - Oom. - - - - - Ad. - - - - -	23 40 5	59 46 44.5 44.3 44.4 44.4	
P. M. 2850	P. M. - - - - - P. M. - - - - - Q. - - - - - Bonn. - - - - - Ad. - - - - -	23 40 35	27 43 35.2 34.6 34.9 34.7 ₁ 34.8	See Bonner Beobachtungen VII, 139.
Gr. 4142	R. C. - - - - - Yarn. - - - - - Ad. - - - - -	23 42 3	63 7 23.0 23.6 23.3	
Gr. 4152	R. C. - - - - - Yarn. - - - - - Ad. - - - - -	23 44 53	63 17 24.0 22.0 ₂ 23.2	
166 Heis Pegasi	Rü. - - - - - H. - - - - - Pule. - - - - - Ad. - - - - -	23 46 38	17 12 21.2 19.0 20.5 20.2	

Number.	Authority.	Right ascension.			Declination.			Remarks.
		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>°</i>	<i>'</i>	<i>"</i>	
XXIII, 216, 217	P. M. - - - - -	23	46	36	11	13	51.7	Middle point between two stars; Pi. 46".4. The difference of declination is about 4".
	T. - - - - -						51.2	
	Q. 62 - - - - -						49.7 ₁	
	Ad. - - - - -						50.3	
Gr. 4159	R. C. - - - - -	23	47	44	38	35	9.2	L. L. gives 6".5; Gr. 12".1.
	Yarn. - - - - -						10.1	
	Ad. - - - - -						9.6	
XXIII, 235	T. - - - - -	23	50	19	21	57	10.3	
	Rü. - - - - -						9.8 ₂	
	H. 44 - - - - -						8.9	
	Pule. 46 - - - - -						9.6	
	Ad. - - - - -						9.5	
A. Ö. 26212	A. Ö. - - - - -	23	51	16	59	19	40.9 ₁	
	Rü. - - - - -						39.8 ₂	
	Oom. - - - - -						40.7	
	Ad. - - - - -						40.6	
XXIII, 238	Rü. - - - - -	23	51	23	10	46	44.5	P. M. — 0".05; c. — o.: L. L. + 3".8; Pi. — 0".2.
	Yarn. - - - - -						41.7	
	Schj. - - - - -						44.1 ₁	
	Ad. - - - - -						42.8	
R. C. 6258	R. C. - - - - -	23	54	44	68	52	47.8	
	A. Ö. - - - - -						48.1	
	Q. - - - - -						46.2	
	Ad. - - - - -						47.0	
Gr. 7	R. C. - - - - -	0	5	12	65	25	50.0	
	Q. - - - - -						50.5	
	Ad. - - - - -						50.2	
R. C. 71	R. C. - - - - -	0	14	27	66	18	41.6	
	Q. - - - - -						40.0	
	Ad. - - - - -						40.8	
Gr. 52	R. C. - - - - -	0	14	34	44	14	36.5	
	Yarn. - - - - -						37.7 ₂	
	Ad. - - - - -						37.0	
L. 655	L. - - - - -	0	23	20	59	17	12.3	
	Oom. - - - - -						11.0	
	Ad. - - - - -						11.0	
O, 122	T. - - - - -	0	29	44	26	33	57.4	P. M. — 0".08, L. Pi.
	Pulc. - - - - -						56.7	
	Arm. - - - - -						57.4	
	Ad. - - - - -						57.3	
L. 960	L. - - - - -	0	31	39	59	8	18.3	
	Oom. - - - - -						18.6	
	Ad. - - - - -						18.6	
L. 1210	L. - - - - -	0	39	23	58	53	26.6	
	Oom. - - - - -						26.9	
	Ad. - - - - -						26.8	
O, 245	T. - - - - -	0	51	40	20	43	42.1	
	Arm. - - - - -						42.4	
	Ad. - - - - -						42.3	
O, 255	T. - - - - -	0	54	42	10	30	27.5	
	Kön. - - - - -						27.7	
	Ad. - - - - -						27.6	
Pi. O, 312	P. M. - - - - -	1	4	33	64	20	42.5	
	T. - - - - -						41.2	
	Arm. - - - - -						42.5	
	R. C. - - - - -						42.8	
	Ad. - - - - -						42.3	

Number.	Authority.	Right ascen- sion.	Declination.	Remarks.
I, 30	T. - - - - -	<i>h. m. s.</i>	<i>° ' "</i>	P. M. — 0''.05, Pi.
	Q. - - - - -	1 10 5	20 23 38.5	
	Ad. - - - - -		38.3 38.4	
L. L. 2330	Yarn. - - - - -	1 11 42	36 43 40.0	40.0
	Ad. - - - - -			
I, 90	T. - - - - -	1 22 30	24 37 39.6	
	Arm. - - - - -		38.7 ₂	
	Ay. 72 - - - - -		37.7 ₁	
	Ad. - - - - -		38.9	
I, 145	T. - - - - -	1 34 20	25 6 49.8	P. M. — 0''.04; c. — o.: L. + 0''.1; Pi. + 0''.9.
	P. M. - - - - -		49.4	
	Arm. - - - - -		48.4 ₂	
	Q. - - - - -		47.1 ₂	
	Ad. - - - - -		48.6	
I, 191	T. - - - - -	1 45 24	10 11 30.9	
	Arm. - - - - -		31.8	
	Ad. - - - - -		31.4	
L. L. 3536	L. - - - - -	1 49 36	59 0 57.0	
	Oom. - - - - -		53.7	
	Ad. - - - - -		53.7	
L. L. 3533	Bonn. - - - - -	1 49 42	61 5 11.7	
	Ad. - - - - -		11.7	
I, 213	T. - - - - -	1 50 38	27 11 41.4	P. M. — 0''.07 from Piazzi.
	Arm. - - - - -		40.1 ₁	
	Q. 64 - - - - -		41.7 ₁	
	Ad. - - - - -		41.1	
L. 3606	Oom. - - - - -	1 52 1	59 21 8.4	
	Ad. - - - - -		8.4	







190150
Safford

